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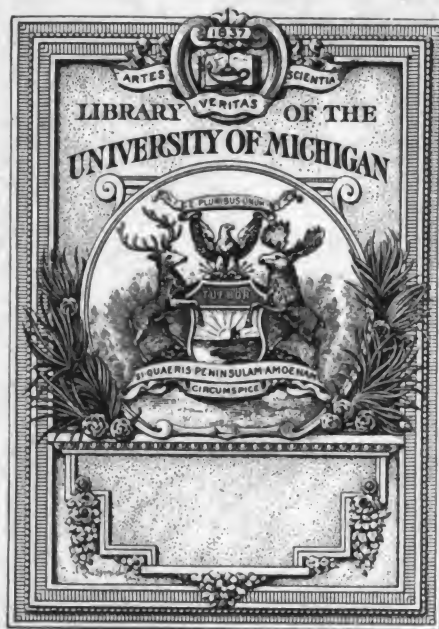
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# Journal of medicine and science

Maine Academy of Medicine and Science





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# Journal of Medicine and Science.

ISSUED ON THE TENTH OF EACH MONTH.

In the Interests of Public Health, and in order that the People of Maine may reap the great Benefits, both hygienic and economic, assured by a judicious Application of the Principles of Preventive Medicine, this Journal supports the following Propositions and urges Physicians and Laymen to work diligently to further their Consummation.

- 1st. The Establishment of a Sanatorium for the Treatment of the Consumptive Poor.
- 2nd. The Abolishment of the Coroner System and the Appointment of Medical Examiners.
- 3rd. The daily Inspection of School Children by School Physicians.
- 4th. The more liberal Endowment of our Medical Schools by private Charity, and the voting of larger Appropriations to our State and Local Boards of Health.
- 5th. The Establishment of a State Bacteriologic Laboratory.

For, surely, health is the prime essential to success in life, and the health of the people is the foundation upon which all their happiness and all their power depends.

Vol. VIII.

PORTLAND, MAINE, DECEMBER, 1901.

No. 1.



## \*The Inspection of Meat and Cattle by the Bureau of Animal Industry of the United States.

By DR. F. W. HUNTINGTON, of Portland, of the U. S. Inspection Bureau of Animal Industries.

**T**HE subject of this paper is one with which but few people are familiar, and many do not know the amount of work done by this bureau. Therefore I will commence by giving you a short history of the bureau.

The Bureau of Animal Industry was established by an act of Congress, approved May 29th, 1884. The cause of its establishment was the urgent need by the Federal Government of reliable information concerning the nature and prevalence of animal diseases, and of the means required to control and to eradicate them.

The value of stock lost annually from disease is enormous, and threatens not only to decimate our animals, but to expose the human family to disease from the consumption of unwholesome meats.

In the year 1891, Congress enacted legislation establishing the federal meat inspection service, and the inspection and regulation of

vessels carrying export cattle from the ports of the United States to foreign countries.

The meat inspection act directs the Secretary of Agriculture to inspect, previous to their slaughter, all cattle, sheep, and swine, the carcasses of which are to be disposed of through the interstate or foreign trade; and authorizes him to make a postmortem inspection.

This enormous undertaking was designed to protect our domestic consumers from the meat of diseased animals, and at the same time to enable the government to certify to the wholesomeness of exported meats. No beef is now allowed to go abroad unless it has been inspected by an inspector of the department, and certified to by him as free from disease. Beginning at a comparatively few abattoirs, the service has been extended until it is now established in forty-five cities, and covers the product of 150 abattoirs. The growth of meat inspection service is shown by the following statistics.

Animals inspected at abattoirs having inspection.

	Cattle	Calves	Sheep	Hogs	Total
1891	83,891				83,891
1896	4,060,011	213,575	4,710,190	14,301,963	23,275,739
1900	5,027,998	308,542	6,170,172	23,328,102	34,840,374

The department assumes the right to inspect all animals slaughtered in establishments that have been granted inspection, and no carcass or meat products which have not been inspected, and passed by an office of

\* Paper read at the Forty-seventh Stated Meeting of the Maine Academy of Medicine and Science, held November 11, 1901.

this department, are allowed to enter such establishment after inspection is granted it.

The managers of abattoirs must inform the inspectors in charge of the hour upon which slaughtering will commence, upon the day following. The inspector shall also be informed by the manager when slaughtering has been concluded for that day, and no animals shall be slaughtered at any other hours unless the inspector is duly notified and is present.

An antemortem examination is made of all animals arriving at the stock-yards intended for slaughter, at abattoirs at which the department has established inspection. Any animals found to be diseased or unfit for human food, shall be marked by placing in the ear, a tag bearing "U. S. Condemned." Such condemned animals shall be at once removed by the owners from the pens containing animals which have been inspected, and must be disposed of in accordance with the laws, ordinances, and regulations of the state and municipality in which said animals are located. No animal is allowed to pass to the slaughter room until it has been inspected.

All animals, on either antemortem or post-mortem examination, found to be affected with disease or injury so as to be unfit for human food, shall be condemned. The carcasses of any animal found to be diseased or otherwise unfit for human food, shall be marked with condemnation tag or stamp, and such condemned meat must be placed in rendering tanks under the inspector's supervision.

The abattoirs under inspection have to provide a suitable room in which condemned carcasses and parts can be held until the inspector can supervise tanking. Such rooms are locked by padlocks furnished by the department, and no one is allowed a key but the inspector.

Should the establishment have no facilities for thus destroying said carcasses, they must be removed from the premises by permit from the inspector to rendering works designated by him, and there destroyed under his supervision. All condemned carcasses and parts must only be disposed of in the presence of an employee of this department.

All persons are warned against removing the tags, seals, or brands attached to condemned carcasses or parts, and are notified that they will be prosecuted under act of Congress, for any attempt to tamper with an inspector's marks or brands.

Each article of food product, whether in cans, barrels, kits, boxes or canvass, made

from inspected carcasses, must bear the official number of the establishment, and the name of the inspector before it can be shipped or exported.

I will now say something about the live cattle export business.

The fear expressed by foreign governments of the introduction of pleuro-pneumonia, Texas fever, and other contagious diseases with animals from the United States, made it necessary to adopt some method by which the history of the cattle exported could be ascertained, and the animals inspected, numbered and recorded, so that a certificate could be issued showing freedom from contagion, or exposure to contagion.

Accordingly, in 1890, a system of inspection was adopted, which is as follows: The inspector takes a record of all the animals, where bought, what town and county, and of whom purchased, and if healthy, a numbered tag is placed in the ear of all export cattle, and a certificate of health is issued for such animals. Sheep and horses are also inspected.

The number of export animals thus inspected in the years 1891, 1896, and 1900 are as follows:

	Cattle	Sheep	Horses	Total
1891	203,703	21,814		225,517
1896	365,345	422,603		787,948
1900	306,182	73,426	37,060	415,668

Another danger that menaced our export trade, had its origin in the alleged cruel treatment of animals on shipboard, and in the improperly filled ships.

In the early years of the trans-Atlantic traffic, before the large and commodious cattle boats of the present day were constructed, these animals were largely carried on tramp ships, vessels which were not engaged in the regular trade, but which were sent from port to port after such cargo as could be obtained. As such ships might not carry cattle on more than one or two voyages a year, they had only temporary fittings, and were without conveniences for supplying the proper quantities of food and water. The pens were so insecure and so exposed, that frequently fittings and cattle were washed overboard. The attendants were often inexperienced, and worthless, the space overcrowded, the ventilation insufficient, and the boats occasionally unseaworthy. As a result of these conditions, reports frequently reached the public, of ships arriving in British ports after a long voyage, with the feed and water exhausted, and the animals dying from hunger and thirst.

Sometimes during storms and heavy seas,

the animals would be thrown against the fittings with such force that the fastenings would give way, and the animals would be mixed and jammed together in the greatest confusion, some being crushed and trampled to death, and others would be bruised and maimed.

Such occurrences could scarce fail to attract the attention of humane people abroad, particularly, when the sentiment of humanity was intensified by the desire to limit American competition, and the barbarities of the trans-Atlantic cattle traffic were described in language glowing with indignation and horror. Cruelties were exaggerated, and multiplied, and atrocities were described that were never committed. As a result, a bill was presented to the British Parliament, to prohibit the importation of cattle from beyond the seas, and the Queen was strongly urged to use her influence to secure its passage.

As a result of this, an act was made March 3rd, 1891, authorizing the Secretary of Agriculture to enforce necessary regulations to secure a safe carriage, and humane treatment of cattle exported from the United States. As a result, the rigid enforcement of the regulations led to the withdrawal of the poorer class of ships in the trade, as they could not afford to fit as compelled by the department in a safe and comfortable style.

Magnificent iron cattle ships were constructed with permanent fittings, and having all the comfort, safety and convenience human ingenuity could provide, and the loss of cattle in transit was soon reduced to a minimum of about one-third of one per cent. The cattle were unloaded in good condition, and as vigorous and healthy as when they went on board, and insurance rates were reduced from \$8.00 and more per head to less than \$1.00 per head.

*Space.*—All cattle are now allowed a space two feet eight inches in width by eight feet long and six feet high; horses the same; sheep a space four feet long by fourteen inches wide.

Fittings must be of sound lumber of the required dimensions, and put up satisfactory to the inspectors.

The ventilation must be up to requirements, which are four large ventilators in each compartment, eighteen inches in diameter for under deck ventilation.

*Food and Water.*—All vessels must carry food and water enough to last them through, which amount will be designated by inspector.

*Attendants.*—The employment of all attendants shall be subject to the approval of the owners of the steamship, and of the

inspector of the port, and they shall have an experienced foreman in charge, and one attendant for every twenty-five head of cattle.

No vessel allowed to take on board any cattle or sheep, unless the same have been allowed a rest of twenty-four hours in yards at the port of embarkation.

The inspector shall, in case he finds any of the fittings worn, decayed or defective in construction, require the same to be replaced before he authorizes the clearance of the vessel.

The inspector or his assistant will supervise the loading of the animals, and see that they are properly tied and stowed, and see that all the requirements are complied with before he clears the vessel.

By the enforcement of these regulations the agitation against the landing of American meats and live stock in Great Britain has been met and quieted, the trade has been preserved and increased, and it has given the greatly needed outlet for our big surplus of meat producing animals.

I have said so much about the inspection of cattle and meats by the Department of Agriculture, that I will now ask your indulgence for a few moments that I may give you an idea of the inspection of meats in this city. This statement will necessarily be short, for in truth we have none, except what is done by our Hebrew brothers, for their own benefit, and it should be added that this inspection does not always work for our good, as many of the carcasses they condemn as unfit for them to use as food, are not consigned to the rendering tanks, but are sold on the market to the various cheap meat shops and meat peddlers in this vicinity.

If you are in any way particular about what you eat in the meat line, I would advise you to buy only inspected meats.

The only inspected meats that are sold here today, are received by the large house of Swift & Co., Nelson Morris, Armour & Co., Hammond & Co., and two or three other concerns whose establishments are under government inspection. All carcasses or parts of carcasses, that do not bear the government inspection stamp, and that you have not seen killed yourself, steer clear of.

What we need most in this city is a well regulated slaughter house under the supervision of the Board of Health of the city, with competent veterinary inspection.

A well regulated system of slaughter houses is as necessary to public health as is a well regulated system of schools to public education. In this vicinity are five or six small slaughter houses on the outskirts of the town, and scattered in as many different



directions. Our Board of Health does not pay any attention to them, and as a result the meat supply is without any sanitary supervision. The general rule may be laid down that every slaughter house is a center of infection for the surrounding neighborhood, unless properly constructed, and I am sure ours are not so constructed.

The first step to be taken, then, is to reduce the number of localities from which infection may spread, and this can only be done in one way, and that is to compel all the butchers of the city to do all of their killing at the same slaughter house. If the slaughtering is all done in one place, it is comparatively easy to control the class of animals used.

In many European cities and towns, the slaughter house is built either at municipal expense or by a stock company, and stalls are let to butchers for killing purposes. This plan has been found very satisfactory, and is what is very much needed in this vicinity, and when we get this, we can eat our meats in safety and in comfort.

In closing I wish to emphasize the statement that the thing most needed in this vicinity is a public slaughter house under proper supervision.

#### \*IN THE PROGRESS OF MODERN MEDICINE,

##### Important Developments as Ways and Means.

By FRANKLIN STAPLES, M. D., Winona, Minn.

**T**HE history of medicine in recent years has shown at least two most important developments, which, as now seen, have been essential aids and factors in the signal advancement realized. These are, first, what is included in the discoveries and developments made in the science of bacteriology, and, second, the rise of state medicine. Both of these have come to their places among the moving forces in the world of practical science, since the middle of the last century. They belong to no single country or people, but to the world at large; their originators and workers being found in every advanced nation throughout the world. The practical use of these educational means has resulted, as usual, in throwing new light on old questions, and in presenting at least as many others that are new. A few examples may illustrate.

\*Paper presented at the Forty-seventh Stated Meeting of the Maine Academy of Medicine and Science, at the meeting held, Nov. 11, 1901.

*First, In Bacteriology—Self-Limitation of Disease and Immunity:*—It has long been known that many diseases, especially those of the infectious class, are self-limited in their course and time of duration; and, moreover, an attack of disease would in some way render the body incapable, at least for a time, of receiving the infection in such a way as to cause its recurrence. A note from the history of the discovery of this acquired immunity will help to understand it. The Englishman, Jenner, at the close of the 18th century, rather by accident than otherwise, discovered the fact that immunity to the infection of small-pox could be secured by use of the virus of the milder disease, the kinpox, by inoculation. The fact of the discovery was then made known to the world; but it remained for scientists, after the middle of the 19th century, to begin to understand the reason for this; the meaning of immunity to disease, and the nature of its production. This knowledge and what belongs to it, came with the advent of bacteriology into practical science. It is now given in a word as follows:—The germ, generally introduced by infection from without, while doing its work of disease production and continuance, forms a material in the tissues on which it works, and thereby creates a condition in the same which, in its own time, destroys the parent germ itself, and renders a further introduction ineffectual. The time from the first reception of the specific germ to that of the manifestation of disease, that is, while the germ is developing itself, and is getting its hold on the tissues, is known as the period of incubation; the time of the life and activity of the infecting germ, is the limited period of the disease. If the case does not prove fatal from an overwhelming toxic influence before the active cause is thus destroyed, and the disease element has become inert, and complications do not aid in destroying life, recovery is the natural outcome. The rational treatment is that which hastens the destruction of the virulent germ, and aids in causing immunity.

There is such a thing as natural immunity. This exists in persons who are not affected by exposure to the special infection, and this not being the result of previous disease or treatment. An immunity caused by the specific disease is termed an acquired immunity. An attack of small-pox, for instance, will ordinarily produce immunity to the infection of this disease. Artificial immunity is that produced by some external agent, generally some form of antitoxin, so called.

*Concerning Antitoxins*:—The term, antitoxin, applies to the attenuated or reduced forms of bacterial toxins; and compares with these more virulent agents, as does the vaccine virus to that of variola. Antitoxins are generally obtained by filtrations of blood serum, from animals which have been rendered immune by artificial means. The substance thus obtained is, in fact, that which was rendering the animal tissues immune to the disease before it had been extracted from the same. There are, however, several laboratory methods of producing what is practically the same material. These are by cultures, so-called, in all of which, the virulent germ, being destroyed by its action in the culture, leaves the material, which, being sterilized, is made a suitable antitoxin to the specific disease. It is seen that the process of antitoxin production, whether it occurs within, or is made to occur without the animal body, is practically the same. Its efficiency in use has become more complete and satisfactory for some diseases than for others; the use in diphtheria, tetanus, anthrax, and possibly others now, being rather in advance; but further extensions and improvements are reasonably expected, in the not distant future.

*Other Advantages and Gains*:—An important use of serum culture of bacteria is found in the part it has come to have in demonstrative diagnosis. The culture of specific microbes of various affections, both of animals and man, affords a study of their different characteristics, forms, etc. The educated eye is able to determine the microbe, and assign it to its place among diseases and in pathological conditions. Here comes in the higher use of the microscope. From the time of the invention of this instrument by the Hollander in the 17th century, no so important use has been found for it. Its aid has now come to the making of science.

Another fact worthy of mention is this: The study of the microbe in its relation to disease cause, has directed the minds of practitioners to the necessity for absolute cleanliness in all things. In addition to what has been taught concerning the cleanliness in persons and appliances, direction has been given for the construction and furnishing of hospitals, and for the work of sanitation in public institutions and private homes. In the advantage to professional work, it is known that the domains of clinical medicine and operative surgery have been largely extended and their good results as greatly increased.

Lastly in this connection, we have in mind the advancement of medical education. It may be said in a word as follows: The study of the advanced pathology of the germ in disease, and of methods of medical and surgical management, has required and secured the enlargement of laboratory work in the educational course—practically the establishment of a new department—with the necessary time-extension for the same. The direction of this study in pathology is in the way of realism in medicine, and greatly helps to characterize the advanced medical education of the present time.

*The Part of State Medicine*:—The term, "state medicine," may include not only what is known as state preventive medicine—sanitation under the law—but what is covered by state regulations for the practice of medicine. All of this, existing as it does throughout the leading nations of the world, is a development of recent years; has come with and by the civilization of modern times; and, in turn, has had its part in making the same. Although preventive medicine has existed in certain important ways for half a century or more, its greater opportunity for advancement and usefulness came with the higher developments of the science of bacteriology; when the nature or natures of different disease infections became better known, together with the indications for management and control. With such knowledge in possession, the State was able to undertake intelligently the work of prevention; and, moreover, to aid the further progress by its own means of educational investigation. Public service of this kind has required and brought into existence, among other things our state laboratories, and formed its department in our State Universities. This account applies correctly at present to conditions in several States of the Union, and will soon apply as well to others.

In our national government, the departments which more than others have important functions in general state medicine, are the Marine Hospital Service, so designated, and the departments of War and Agriculture. The first of these, because of the great extension of its service in national sanitation, has so completely outgrown its original name, that a larger and more suitable designation is now in order. In its study of conditions and sanitation in all parts of the country, and by its publications, which are sent to all local organizations for exchange, and this as well with other countries, its educational and practical benefits have become universal. Our space will

allow only a single mention of the other departments noted. While the department of agriculture has important functions in the line of sanitation in its general service, the educational influence of the special work in its bureau of animal industry, has had its part in the extension of state medicine and the advancement of medical education. Original work in each of these departments has had the effect to advance the standard of medicine and medical education generally. What has come to the advancement of practical science from these sources, has commanded the attention and interest, not only of physicians and sanitarians, but of the people at large. The influence of this is largely responsible for making the sanitary laws and institutions of the different States of our country what they are today. A most important feature of state medicine in its relations, is that it is of and for the people. The mention of this fact brings to mind the words of the distinguished pioneer sanitarian of Massachusetts, Dr. Henry I. Bowditch, spoken in 1876. In a memorable address at that time he spoke of the province and prospects of state medicine as follows: "It is destined to continue and progress while the nation itself lives, the noblest and most beneficent of all; the profession joining heartily with the laity, and aided by the material and intellectual resources of great States, will study to unravel the primal causes of all disease, with the object of preventing it." Time has shown this prophecy to be true. This union of people and profession has served to educate and elevate the whole.

The second feature or province of medicine under the law, that which of late years has had its signal part in the advancement of medical education and the elevation of medical practice in this country, is best seen by a glance at the record of the recent past. The late eminent teacher and officer in the University of Pennsylvania, Dr. William Pepper, told the story of the struggle in the work of advancement in two memorable addresses before the Medical Department of the University; the first in 1877, and the second in 1893. The first discourse was a sad comment on the degeneracy of the times in the world of medicine, and especially in medical education; and the second was an exultation because of the progress made in the intervening years. The 1877 estimate of the educational status, was, in substance, that it was altogether unsatisfactory; and that it compared poorly with other departments of education in the country and with

those of other nations. This estimate of American medical education, made as it was from the high standpoint of the university Provost, might by some have been regarded as not wholly correct; but it can hardly be claimed that the story of the worthy authority mentioned, was not, at least, well founded on fact. The following were mentioned as causes for the unworthy condition of things: Too many small medical schools; no examination or required standard for admission; only three years required from entrance to graduation, with the terms in each year too short; and, more than all, as a means of competition for patronage among the many schools, a low, if any, standard of scholarship. It may be claimed that this account could not in all respects apply to certain schools and university departments of medicine. What was claimed was true, however, of a sufficient number of schools to render the unworthy competition quite effective, and helped to prolong the struggle for advancement. At the time of his second address Dr. Pepper was able to rejoice at the progress made during the sixteen years that had passed. A quarter of a century has now elapsed, and the upward progress has continued. In the fulness of time, in addition to other growing influences which had affected the professional and public mind, came state medicine in its departments. State preventive medicine found the necessity for laboratory work in its study of pathology and disease-cause, in the way to successful prevention, and in due order practical knowledge in this direction was made a requirement. Practice laws of the states, at first requiring an accepted diploma for admission to practice, now made such evidence of graduation a requisite for admission to the state examination, success in which was necessary for permission to practice. The effect of such state legislation upon the schools of the country was to elevate the standard of medical education, and make the requirements for graduation as near as possible to what had been so long desired by physicians and teachers in the higher medical schools. At the same time additional educational requirements for admission to the college course were established; the time of the course was lengthened to at least four years, with a lecture and clinical instruction term of at least six months in each year. The public sentiment in favor of higher medical education, had not only made this legislation possible, but had caused to exist the means above mentioned for the study of pathology in its

present state of advancement, on the knowledge of which are based the modern methods of management and prevention.

The tendency of progress along all lines leading to the higher knowledge of practical medicine, has been away from uncertain theory to the more substantial realism, which, in the order of things, has come to be the crowning feature.

This brief mention may be understood as including only a part, but that an important one, of the events and developments in the higher progress of American medicine, in the latter part of the nineteenth and at the beginning of the twentieth century.

#### NEW YORK ACADEMY OF MEDICINE.

##### Section on Orthopaedic Surgery.

Meeting of Oct. 18, 1901.

GEORGE R. ELLIOTT, M. D., *Chairman*,

#### INFANTILE PARALYSIS SIMULATING CONGENITAL TALIPES CALCANEUS.

Dr. A. B. Judson presented the case of a baby five months old with what at first view appeared to be left congenital talipes calcaneus. Passive motion was abnormally free, active motion was deficient. The position was that of talipes calcaneus. The history was given of a three days' sickness occurring when the child was two months old, in which there were fever, trembling and general cutaneous hyperæsthesia, but no vomiting, diarrhoea or convulsions. The diagnosis of infantile paralysis was made and will probably be confirmed by partial spontaneous recovery during the next year. The cutaneous circulation was apparently normal and the general health of the infant was excellent. The left thigh and leg were one-half less in circumference than the right. The arms were normal. Congenital calcaneus was rare. Such a case with the resistant tissues and lasting deformity of congenital varus would be well worth careful study and description.

Dr. W. R. Townsend agreed with the diagnosis of infantile paralysis. He believed well marked congenital talipes calcaneus to be very rare, although he had seen such cases.

Dr. George R. Elliott asked Dr. Townsend what muscles would be affected to cause such a deformity as that presented.

Dr. Townsend replied. Gastrocnemius soleus and plantaris.

Dr. Elliott asked Dr. Judson if the poliomyelitis was limited to the posterior group of muscles.

Dr. Judson replied that a careful electrical examination had not been made.

Dr. Henry Ling Taylor said in reference to the statement about the rarity of congenital talipes calcaneus, that while he agreed that the severe forms were rare, the milder varieties were fairly common; they, however, usually corrected themselves without special treatment.

#### CREPITUS IN CERVICAL POTT'S DISEASE.

Dr. Judson presented a case of crepitus heard in cervical Pott's disease in a woman forty years old, accustomed to house-work. Symptoms had been present about a year. Movements of the head had caused pain of the forehead and face called by the patient—"neuralgia." She had often supported the head with her hands and at night had needed a number of pillows carefully arranged to hold the head in a comfortable position. When she stopped work for a time she felt better, but on returning to work the trouble was increased. The deformity was marked, being partly due to a forward displacement of the axis of the head, a condition invariably present in cervical Pott's. The width of the neck posteriorly was increased. There was no abnormality of the trunk or any other part of the skeleton. She said that at one time the head was much flexed and inclined to the left. Six months ago she noticed that motion of the head in rotation was accompanied by a cracking sound. On examination the crepitus was readily heard, simulating bony crepitus, but evidently due to tendinous or muscular slipping.

Dr. Townsend said that he could not agree with the diagnosis of cervical caries; he was inclined to consider the case one of osteoarthritis which diseased condition had been well described by Goldthwait in the Transactions of the American Orthopedic Association, Vol. XII.

Dr. Elliott agreed with Dr. Townsend that the symptoms and objective signs were not typical of cervical caries. He would expect to find more real disability, more rigidity due to reflex spasm in spite of the fact that frequently the symptoms or signs of caries in the adult were frequently masked. Cervical caries appearing at the age of forty was not common and at that age almost invariably progressive, which did not appear true in the present case.

The crepitus, too, which was elicited so markedly upon free movement of the neck rather pointed to another disease.

The word *caries sicca* he believed to be largely a pathological misnomer.

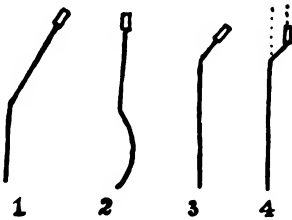
Dr. Taylor agreed with the two foregoing speakers. He thought the patient should have shown more severe symptoms and more



tendency to progress were it a case of caries.

The indications for treatment, however, of osteo-arthritis and tuberculosis of the spine were the same as far as protection and support to the diseased vertebræ were concerned.

Dr. Judson expressed himself as unable to amend his diagnosis. He considered the case as a typical one of cervical Pott's disease and recalled the symptoms in detail. He took the opportunity to call attention to an important sign of disease in this region. Figures 1 and 2 showed how the lordosis accompanying deformity in the dorsal region was unconsciously assumed by the patient for the preservation of his equilibrium. This has been well shown in the photograph exhibited by Dr. H. Gibney at the meeting held on Oct. 19, 1900. In cervical disease, figures 3 and 4, the equilibrium was not seriously disturbed but the necessity of a horizontal visual axis led to extension of the head at the occipitoatloid articulation with the characteristic forward displacement of the axis of the head seen in figure 4 and in the patient who had been presented.



Dr. Leonard W. Ely asked if this sign was invariably present.

Dr. Judson replied that in adults it was.

#### OSTEOTOMIES FOR CORRECTION OF BOW-LEGS AND KNOCK-KNEES.

Dr. Homer Gibney presented six cases—and described method employed. Three of the cases shown were very marked anterior curves of tibiæ entirely corrected. Tracings, photographs and notes from the records of the Hospital for Ruptured and Crippled were presented.

Dr. L. A. Weigel, of Rochester, said that he was somewhat in doubt as to what constituted a true bow-leg and the proper course to pursue in a certain class of cases. An outline tracing of the leg might show an apparent bowing while a skiagraph would demonstrate that the shafts of the leg bones were straight. He exhibited skiagraphs of two cases to illustrate. In one of the cases the deformity was corrected by osteoclosis, but the skiagraph showed that the legs were straightened by making the bones slightly crooked.

Dr. Townsend agreed with Dr. Weigel about straightening legs often by making them "crooked." He had found frequently that in cases where the deformity was ideally corrected the bones were actually very crooked and his experience with radiographs had been similar to that expressed by Dr. Weigel.

Dr. Taylor wished to call attention to the importance of correcting inward rotation of the tibia in cases of bow-legs. There often existed an inward twist of twenty degrees or more and this could only be obviated by everting the lower fragments at time of operation. In the cases presented by Dr. Gibney he noticed that two of the children showed a marked inward twisting of the feet. Too little attention had been given to this point by operators. Neglect to correct this rotation meant an incomplete correction of the deformity and liability of a recurrence of the bow-leg. He advised breaking the fibula as well as the tibia, well loosening the fragments, twisting the foot out as much as possible—the resulting eversion would not be too great.

Dr. R. H. Sayre remarked that in one of the cases presented in photograph by Dr. Weigel, the thighs as well as the legs were bowed, and the bowing was accounted for probably by twisting of the neck of the femur as well as the lower part of the femur near the condyles. In many cases the distortion was found close to the epiphyses while the shafts of both tibia and fibula were straight. Operation should be performed at point where deformity existed.

#### COXA VARA.

Dr. Taylor presented a boy first seen by him in May, 1900, then six years old. He gave the history of having walked at the age of eleven months and of having been lame in the left leg ever since. There was one-half inch shortening of the left leg, the trochanter was elevated one-half inch and the head of the femur could not be felt. The symptoms pointed to coxa vara but he had not known of any other cases of this disease beginning at such an early age. A skiagraph showed that the head of the bone was in the acetabulum and that the neck was bent downward. There was no evidence of rachitis. The leg at present was smaller than the right; abduction and outward rotation were limited, other movements were free; shortening and elevation of the trochanters were the same. There had never been any pain.

Dr. Sayre said he should judge from the skiagraph that there had been a fracture of the neck of the femur and the inability to

secure history of traumatism did not necessarily have any weight. The child had not been seen till six years of age and gave the history of walking at eleven months and limping. He judged that this might be a case of fracture or of epiphyseal separation.

Dr. Weigel asked if there had been epiphyseal separation would not the action of the muscles have tended to draw the trochanter and shaft upward, the head being retained in the acetabulum.

Dr. Sayre said that would depend on the extent of the fracture, in other words, whether it were complete or not.

Dr. Taylor said that there was a history of several falls, none of them severe or followed by symptoms of injury.

It was evident that coxa vara was present whether as the result of traumatism or malformation.

Dr. Weigel read a paper on "Skiagraphy in Orthopedics," illustrating his discourse with many negatives adjusted in the X-ray stereoscope which he used. A brief reference was made to the technic of stereoscopic skiagraphy and the advantages over the ordinary method of producing X-ray negatives were fully explained. The technic was not difficult. He considered one of the principal difficulties in skiagraphy—the proper interpretation of the negative in the stereoscope. The idea of depth was given which was not apparent when viewing the negative alone. By reversing the negatives in the apparatus the pictures could be viewed from the opposite surface.

Dr. Weigel also presented the subject of "fractures and dislocations in tubercular joint disease," with illustrative skiagraphs.

One of these was of a boy who was said to have double congenital dislocation of the shoulders, which proved on careful examination to have been tubercular destruction of the joints, with partial dislocation. On one side an abscess cavity of large size communicated directly with the joint.

In another case involving one elbow joint and forearm the necrotic process gradually alternated the shafts of the radius and ulna. Eventually a complete separation of the latter bone occurred about one inch below the joint and allowed the bones of the forearm to slide upward and backward.

American surgery ranks as high as that of any country in the world, and in the medical men chosen to attend the late President, America was worthily represented. Success in such a case would have been a triumph, but defeat is not a disgrace.—*British Med. Jour.*

## CLINICAL NOTES ON HEROIN.

By W. F. PENNEBAKER, M. D., and S. TRIPP, M. D.,  
Pleasant Hill, Ky.

Although a new remedy, heroin has been found to possess so many valuable properties that it has been much more thoroughly investigated than many older preparations. The point of special interest in regard to this drug is its remarkable action upon the respiratory tract. While it reduces the number of respirations, its action here is not that of a depressant, since it increases the volume of inspiration and the force of expiration. This property has been well utilized in the treatment of dyspnea. On the other hand, the power of heroin to allay irritation of the nerves of the air passages has rendered it a favorite remedy for the relief of cough. As an analgesic its exact position has not been determined, but the results thus far have been encouraging. Compared with other narcotic remedies, and especially morphine, heroin has proved remarkably free from after-effects. Some instances of unpleasant sequelæ have been reported, but they have been of a mild degree, and attributable in many instances to excessive dosage.

It must be remembered that heroin is active in much smaller doses than morphine or codein, and that the large doses formerly recommended are unnecessary, or should not be resorted to until a trial has been made with smaller quantities. In administering heroin, also, care should be taken not to give it in combination with alkaline drugs, such as bicarbonate of sodium, as it is stated that these are liable to decompose it in time and render it inefficient.

The opportunity to test the merits of this new remedy presented itself recently, as it was prescribed in our own family by a consulting physician. The limited use of heroin since has given results so marvellously beyond our expectations that it seems proper to add our commendations to the growing endorsement of this morphine derivative.

CASE I.—The patient was an elderly gentleman, the subject of chronic bronchial asthma superinduced by autumnal hay fever. Heart complications, viz., arrhythmia and brachycardia added greatly to his distress and apprehension, and indigestion, largely the result of indiscriminate medication extending over a period of years, completed the symptomatology of his trouble. The administration of morphine never relieved his condition without inducing remote effects that were objectionable. Heroin, one-twelfth grain, was prescribed p. r. n., and greatly

relieved the dyspnea and insomnia. The use of this drug greatly strengthened the power of the respiratory movements. Its continued administration, however, produced constipation.

CASE II.—Infant, two years of age, had been previously treated for acute poliomyelitis, the present illness being a continued fever with abdominal distress, great restlessness, and a tendency to convulsions. One tablet of heroin hydrochloride, one twenty-fourth grain, was dissolved in eight fluid drachms of water, and one teaspoonful of the solution given every hour p. r. n. It was seldom necessary to administer more than one dose, with the effect of relieving the hurting in the abdomen, quieting the nervous system, and inducing sleep.

CASE III.—Woman, aged about twenty-eight, mother of one child, subject of chronic hepatic and tubo-ovarian pain; dysmenorrhea and induration of left tube and ovary. Her hepatic symptoms have existed for three years, and are not connected with child-birth. Pressure over the region of the liver elicits tenderness of an inflammatory character; the liver is not enlarged; her suffering has practically made her an invalid. The relief afforded by morphine was incomplete. Heroin hydrochloride, one twenty-fourth grain, p. r. n., was more effective in assuaging the pain, which was nearly constant, than any remedy that had been exhibited.

CASE IV.—Girl, aged fourteen years, with an extremely unstable nervous system; hysterical and prone to headaches during her childhood. The appearance of the menses produced a change in the site of the neurosis, which now assumed the type of an ovarian neuralgia. For this condition Kenyon's neuralgic tablets were prescribed; but after continuing the treatment for a short period of time, the protean character of the affection was again made manifest, and localized chorea affecting the right upper extremity appeared and necessitated a change of treatment. The affected extremity became paretic and cooler than the opposite member; the heart muscle was found to be affected by the contractions, as was determined upon auscultation. We are aware that the existence of chorea affecting the heart muscle has been questioned, though witnessed by some observers. As the disease progressed the contractions became nocturnal, and the patient passed into a cataleptic condition, making it necessary to disturb her slumbers at night to avoid the trance. Again the seat of the localized contractions changed, involving the respiratory muscles and diaphragm. In ad-

dition to the administration of specific medication directed to the chorea, heroin hydrochloride one twenty-fourth grain, was prescribed, one tablet, t. i. d. This was done with the consent of our consultant, Dr. Clay Davis, of Harrodsburg, Ky. This remedy we believe to have been of real value in supporting and sustaining the cardiac and respiratory centers and ganglia. It could not be said to mitigate the severity of the contractions, or to secure for the sufferer sleep. The value of opium and especially morphine in profound enfeeblement due to loss of sleep or to fatigue from excessive exercise is well known. It enables food to be taken and rest secured, and induces general comfort and aids the reparative process. This it does when given in small doses; the slightest development of narcosis in such cases would be followed by reaction and inimical consequences. In cardiac disease with tumultuous acting heart, narcosis would also do harm and increase the venous stasis and dyspnea, while if not used as a narcotic, the drug has the opposite effect (the exhibition of small doses) and seems to restore the disturbed balance of the circulation (Dr. Peabody). Heroin hydrochloride, as it was given to this patient, we consider to have been an invaluable supporter of nervous energy and an equalizer of central and ganglionic innervation during the prolonged and spasmodic contractions. Its effects were certainly more pronounced than morphine sulphate administered hypodermically, which seemed to possess no palliative power.


CASE V.—Woman, about thirty years of age, the mother of two children, the subject of la grippe. Persistent cough with asthmatic breathing and dyspnea were symptoms that the usual remedies failed to subjugate. Heroin, one-twelfth grain, was prescribed p. r. n., which relieved the dyspnea and asthma, but did not control the cough.

CASE VI.—Girl, seventeen years of age dwarfed in stature and poorly developed. She is the subject of congenital heart disease. During an attack of influenza, accompanied by harassing nocturnal cough and asthmatic breathing, heroin, one twenty-fourth grain, one tablet t. i. d., ameliorated her symptoms.

There are about 2,500 hospitals and asylums in the United States. These give employment to 65,000 people and pay over \$23,000,000 in salaries. These hospitals have 300,000 beds, are attended by 37,500 physicians, and treat over 1,000,000 patients during the year.—*Cleveland Med. Gazette.*

### Some Phases of Quackery.

By P. J. NOYES, of Lancaster, N. H.

HE following quotation from an editorial article in one of the leading Pharmaceutical journals, in a recent issue, furnishes a convenient theme: "The mental darkness of the general public in matters medical and pharmaceutical, is probably the strongest point of evidence the future historian will use in proving that the people of the present century had only the thinnest veneer of civilization. That it was possible for a race claiming to be enlightened to spend millions of hard earned dollars annually, on so-called patent medicines, when these nostrums were mostly buoyed up by falsehood, is a very discreditable showing."

This may seem unjust and severe, but is it wholly so? A comparison between a few historic facts and present conditions, would seem to indicate that we are controlled in some matters as much by superstition and blind unreasoning faith as at any period in history. To be sure under the illuminating and irresistible light of modern science the world has made rapid progress, and has thrown off the thralldom imposed upon it by the scholasticism of medieval theological interpretation. We do not burn witches. We do not subject the insane to revolting torture to exorcise diabolic possession. We do not as a people resort to the fetich to ward off or cure disease. Science has taught the law of cause and effect—that the violation of law is the only cause of disease, and the cure is the application of those rational means which are the result of centuries of experience. So while unreasoning superstition has ceased to fill the world with horrors, what does remain is less excusable in the light of the higher education of today—which means a knowledge of physical and natural law—so that practices or belief which are opposed to such light, can hardly claim excuse.

For centuries disease was attributed to diabolic influence expressing itself through the agency of witches, and untold thousands of poor innocent women and children were subjected to the most cruel tortures and a revolting death. The only cause assigned for the many epidemics—black death, cholera, etc.—which several times nearly depopulated Europe, was the wrath of an offended Deity, and the only means taken to stop its progress was prayer and religious processions.

A belief in the potency of the relics of saints for the cure of disease, which from pagan times had been practiced more or less, became fully developed in the later centuries, and afforded charlatans the opportunity of robbing innocent, confiding people of their meager earnings.

In more modern times superstition and credulity assumed another phase. It was discovered that great potency for the cure of disease inhered in the "royal touch," especially in the cure of epilepsy and scrofula—the latter disease coming to be known as "King's Evil." That prince of debauchees, Charles the second, assumed this power in a high degree, and during his reign, more than a hundred thousand sufferers were completely cured by the magic of the royal touch, and in many cases by a simple look, and then as now these marvelous cures were abundantly authenticated by the "unsolicited testimonials" of grateful people, who published the wonders to the world, for the "benefit of suffering humanity." We wonder that such a degree of credulity could have taken possession of a people endowed with reason, and we are likely to pride ourselves on our superior intelligence and enlightenment, without realizing the little advance that has really been made. A modern prototype of any of the incidents referred to is not far to look for.

Not many years ago a petition was sent to Parliament asking that a day be set apart for the purpose of offering up petitions to the Deity, to stop the ravages of an epidemic then prevailing in Scotland. Lord Palmerston refused the petition, and suggested that vigorous sanitary measures would be of more avail than prayer. For this action he was stigmatized as an atheist, and ostracized by the Church of England. A few years since this nation was on its knees praying that the life of one man might be spared. As far as this act expressed a deep sympathy it was commendable, touching and beautiful, but in so far as the act expressed any expectation that there would or could be any interference with the course of natural law, the difference between it and a religious procession of the sixteenth century to stop the ravages of the black death is hard to see.

Every year pilgrimages are made to Old Orchard Beach, by thousands of people, suffering from every form of disease, and all are at once cured through the efficacy of prayer—a process less tangible than the "royal touch." Less than twelve hours ride from Lancaster, a shrine exists, where some relic of a saint is made to do duty by



imparting its virtue for the healing of disease, and the results are as marvelous as those wrought by the bones of Saint Rosalia of Palermo, which for ages cured disease, and warded off epidemics. It will be proper to add, that some years since Prof. Packard the eminent osteologist discovered that instead of being the relics of a saint, they were the bones of a goat. Notwithstanding they have gone on and are still doing a flourishing business. Not only have we the counterpart of any of the phases of ancient or medieval superstition, but we have "gone them one better," in a late development of a supernormal mental phenomenon which ignores the existence of things and sweeps away without remorse the law of causation.

But the sum of human credulity embraced in all the isms and faiths do not surpass the modern phenomena of the unquestioning faith reposed in the mysterious nature, the miraculous virtues, and in the inspired words of the "discoverers" of the cure-alls, backed as they are by the "unsolicited testimony" of fortunate and grateful people, (with photograph,) who have been "rescued from a lingering death," to tell the suffering world what a dozen bottles of Dr. G's. "Nerve Regenerator" has done for them.

The feature of the business most richly deserving condemnation, and the one which has contributed to a large extent in producing its present colossal proportions, is the practice of otherwise sensible and conscientious people lending their influence and aid in the way of testimonials, endorsements, recommendations, etc. It is not to be assumed that ministers of the gospel, lawyers, judges and many good women are actuated by other than proper motives, but the fact that they do lend their influence in aid of a business which is illegitimate, and which is prohibited by law in most of the more enlightened countries, only emphasizes the fact of the widespread prevalence of that "mental darkness," relating to the most important subject that can occupy ones attention—the cure of disease and the preservation of health.

An article in point which recently appeared in the *Boston Transcript* is so comprehensive that it is here republished in full:

#### THE ALCOHOLIC MASQUERADE.

"A well-known clergyman of this city says over his own signature that a certain patented medicine, 'if widely and wisely used, would relieve nervousness, soothe restlessness, reduce sickness, strengthen the body, invigorate the mind and add happiness to life.' This is an especially good word to

say for alcohol, for it is only the alcohol in the medicine referred to that has any medicinal value, in the opinion of the officers of the commonwealth, who have caused it to be analyzed. This medicine, or tonic, contains twenty-one per cent. of alcohol, and is purely a stimulant, the same as is the glass of whiskey which the unsophisticated people who drink their alcohol under another name regard with holy horror. It is a puzzle to persons having consciences how a minister of the gospel can allow himself to recommend any universal cure-all, knowing as he ought to know, that no combination of drugs is equally good for all persons; but when a minister of truth goes a step farther and unreservedly and by false pretence recommends his parishioners and the public generally to take to dram-drinking, language cannot readily be found adequately to characterize the enormity. It will not do to say that the minister did not know that the medicine he recommends contains alcohol and nothing else of value. He might have known, had he been as eager to ascertain the truth, as he appears to have been to say something agreeable to the proprietors of the medicine in question; for the information is easily obtainable by anybody who desires it.

But the clergyman in question is in reputable company. Among those beside himself who have given in their testimony to the great value of this alcohol-in-masquerade are a Vermont physician, an Iowa business man, a Maine judge, the proprietor of a New Jersey temperance hotel, a South Dakota lady, a Congregational minister's wife in Minnesota, a Kansas physician, an aged Connecticut clergyman, a prominent Methodist pastor, and a widely-known temperance reformer. Not one of these, probably, for love or money could be induced to partake of a drop of intoxicating liquor, knowing it to be such, but nevertheless, they publicly advise people generally to brace up on alcohol under a lying name, and presumably brace up on it themselves. Else how could they tell of its invigorating effects? Either they know what they are recommending or they do not know. In either case, as disciples of temperance and as conscientious men and women, they are doing a wicked thing unless, in their opinion, dram-drinking is a healthful instead of a hurtful practice. Even in this case, they are guilty of hypocrisy or cowardice in attempting to disguise their sentiments.

Let it not be supposed that the medicine referred to is the only one in the market whose extensive sale is based upon the fact that it is merely alcohol in masquerade.

There are many others, and not a few of them are especially recommended as "temperance drinks." In a list of sixty-one "tonics and bitters" which have been analyzed by the State Board of Health, and which contain alcohol in volume all the way from six to forty-seven per cent., we find one that purports to be "not an alcoholic beverage," which contains 6 per cent. of alcohol; one that "contains no spirit," and yet assays 6.1 per cent. alcohol; one that is "not a rum drink," but contains 13.2 per cent. of alcohol; one containing 19.5 per cent., which is advertised as "entirely harmless;" a sulphur bitters, said to contain no "alcohol," but which contains 20.5 per cent. of alcohol and no sulphur; one that is "entirely vegetable and free from alcoholic stimulant," that is no less than 25.6 per cent. alcohol; one that is "recommended for treatment of alcohol habit," that contains of alcohol 26.5 per cent.; one that is heralded "a non-intoxicating stimulant, whiskey without its sting," that has a percentage of 28.2 per cent. of alcohol, and one which is "purely vegetable" and "recommended for inebriates," that contains 41.6 per cent. of alcohol. The dose recommended upon the labels of these prescriptions varied from a teaspoonful to a wineglassful, and the frequency also varied from one to four times a day, "increased as needed."

The health authorities of the State class all of these as "tonics and bitters," and many of them bear one or the other of these characterizations on the label; but very many of them are recommended under designations which make their disguise more difficult to penetrate. In no case is the medicine what it purports to be, and in every case, so good medical authority says, the sole value consists in the stimulating effect of the alcohol.

If alcohol is really so beneficial as some of the teachers of healthful habits, of morality and of righteousness would have us believe from their "unsolicited" praise of alcoholic drinks under misleading titles, why not remove the bane entirely from the sale of intoxicants, and have it frankly announced everywhere, not excepting the pulpit or the Sunday school, that rum, gin, brandy, whiskey, etc., "if widely and wisely used, would relieve nervousness, soothe restlessness, reduce sickness, strengthen the body, invigorate the mind, and add happiness to life?"

The foregoing is a fair characterization of the patent medicine business as a whole. Whatever of value there may be in any secret nostrum it is in such disproportion to the extravagant claims made for the wonderful nature of the "discoveries," and the marvelous results following their use—claims that

are invariably false, that they are placed outside of any consideration other than that of utter condemnation.

Ample protection by law should be afforded the public against an evil which is costing the people of the country many million dollars annually, corrupting private morals, inducing an unspeakable amount of mental disquietude and terror through the ingeniously worded literature designed to magnify every little functional disturbance into a fatal symptom, not only that, but by the well known law of suggestion actually creating symptoms where no disturbance has existed before reading the poisonous literature. If the sum of mental suffering, sickness and premature deaths which are directly traceable to the cruel, artful suggestiveness of quack medicine literature, the spectacle would be truly appalling.—In a subsequent portion of this essay we shall take up this phase of the subject more at length and go more fully into the philosophical and psychological aspects of suggestive advertising.

The reason for the absence of restrictive legislation in this matter is the same that usually obtains where corporate interests are opposed to that of the people. It does not seem to make any difference how inimical that interest may be to the public welfare, legislation is shaped to favor the interest of the former.

A notable proof of this fact is that in every effort made before state legislatures to get laws enacted against the manufacture and sale of alum baking powders, has been defeated.

The fact that all the manufacturers of this fraudulent substitute have combined, and have at their command an unlimited amount of money, is of doleful and discouraging significance. Any relief from this condition can hardly be expected until public sentiment shall be created which will demand such legislation as the public health and welfare demands. But how this public sentiment shall be created is a most serious problem. It is too much to expect it through the public press, as that is practically subsidized by the enormous advertising patronage.

It should be the highest duty and prerogative of the retail apothecary to stand between his customers and the dangers of quackery, but unfortunately the drug business has degenerated into mere commercialism, where practical technical knowledge is nearly eliminated, or at least superfluous. The purely commercial spirit has little sympathy with individuals or the community, and it takes little heed of any factor except that of making money in the quickest and easiest way

possible; and so it is not an uncommon thing to see druggists publicly stultifying themselves by proclaiming that they "sell what people ask for," and lay particular stress on this fact, as evidence of their superior skill and ethical conception of a "first-class drug store." Let us see what this *exalted* conception reduced to its logical results mean. A tired mother with a sickly, restless child, sees advertised a marvelous medicine which is designed for just such cases as that of her child—a remedy "that produces natural, refreshing sleep," "gives new life to the child and rest to the mother," etc., etc. She hastens to the drug store for a bottle of this wonder. She is served with all the alacrity and grace of which the "dispenser" is possessed. She departs with her treasure, and the druggist regards the transaction with that complacency induced by the realization of a profitable sale, has "sold what was asked for," and has done nothing to offend his medical genius and ideal—the *quack medicine magnate*. This is not a hypothetical case, but a typical one. If the druggist's humanity had been superior to his cupidity he would have told that poor mother frankly that the remedy was a preparation of opium, (as is the fact with all such remedies,) and warned her of the danger and crime of feeding the deadly drug to her child.

It would be startling if an estimate could be made of the sum of disaster and human woe caused by the opium habit, which to a considerable extent is traceable to these "quieting" nostrums administered to children to produce "refreshing sleep," but which only produce that narcotic stupification which if it does not eventually result in the opium habit, produces a depraved condition of the delicate nervous organization of the child, which it never outgrows. All this is the logical result of the ethics of the *modern, up to date drug store*—a condition forced by the mandate of the quack medicine octopus, and to which the cowardly and incompetent have succumbed—besides it is much easier to wrap up a bottle and tie a string around it than it is to *think*.

This position is most forcibly sustained by an editorial article in *Merck's Report*, the leading Pharmaceutical Journal of the world, which it gives us pleasure to quote in full:

#### THE PATENT MEDICINE CURSE.

"Every pharmacist in the United States should refuse to sell at least those patent medicines which contain, even in the smallest amount, morphine or opium, cocaine or coca, or such other drugs as produce a habit. It

is a shame and a disgrace to our country that any one is allowed to put up and sell as harmless, preparations which are so diabolical. The man who sells opium in any form to give to infants, or cocaine to adults, unless under the strictest kind of medical surveillance, is committing a wrong second only to direct and swift murder. The liquor-dealer is angelic as compared with him.

If the public could be aroused to a full realization of the enormity of such an offense, there would be no trouble in putting a speedy stop to it. Unfortunately, it is a difficult matter to convince them that a habit of slow growth could have its beginnings in the apparently beneficial quieting of a crying baby or in the almost magic relief to a severe asthma. Those poisons not only undermine the constitution of the takers thus making them more liable to disease; but, by establishing a tolerance to and desire for their use, a condition of moral slavery is created, which is far worse than that of the alcohol habit. The users of the narcotic drugs are wholly unable to release themselves from the thralldom of their artificial appetites. In this they resemble the drunkard; but whereas the latter, however besotted he may become, always retains some trace of truthfulness, honor, morality and manhood, the habitues of opium and coca, of morphine and cocaine, are moral perverts as irresponsible as the madmen of our asylums. The law treats them as criminals, former friends shun them as moral lepers, while they keep sinking deeper and deeper in the mire of pollution, without will and without hope. Why should they be despised and punished, while the men who deliberately planned their downfall by taking advantage of their innocence or the ignorance of their mothers and nurses, are permitted to roll in their illgotten wealth and pose as public benefactors? When they see that their cursed avarice is changing once beautiful and virtuous young women into wrinkled, scowling hags, and noble specimens of manhood into blear-eyed, emaciated, and shrunken "Mr. Hydes," it should make them despise themselves. That they should go free and their victims be punished, is a travesty on justice which is sad to contemplate. As a rule the poor victims do not know when the abnormal desire is being created. It is only when too late that they discover, if they ever do, how this demon took possession of them. Its action was insidious, its growth slow and secret. In many instances it began with the soothing syrup given to them by their mothers when they were babies."

(To be Continued.)

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PORTLAND, MAINE, DECEMBER, 1901.



## The Brainard Case.

While "the average man" is the man whom the world cannot get along without—and "the average man" is more than likely to be represented on our jury—and while "horse sense" is a very commendable thing, and is likely to be the principal qualification of the average man, yet it is doubtful if the verdict rendered in the Brainard case will tend to increase the respect of the public in the trial by jury system.

In this case there was no dispute but that the defendant George H. Brainard had committed a heinous crime and that he had been taken red handed in the very act. So that, when the defense of insanity was set up by his attorneys the chief questions to be decided by the jury was whether or not the defendant was insane, and if so, was he, at the time, conscious of his responsibility. That is, if he was insane did he also have a conception of right and wrong so as to be responsible for his acts.

Looked at from one point of view—and this view has been called by some "the common sense view of the case"—there is little doubt but that the jury brought in a good

verdict. Here was a man who had been guilty of a wholesale slaughter of his fellow-men and had been caught in the act. He was, consequently, a dangerous man to have at large in any community, and the state prison was the safest place in which to confine him. In this view of the case and in this connection we cannot but think that the remark of the attorney general—a remark which was objected to and which ought never to have been made for there was nothing in evidence to support it—this unwarranted remark must have had an influence on the jury in their agreement to a verdict. This remark related in substance that within a short time a man accused of murder, but acquitted on the plea of insanity and sent to an asylum, had been pardoned out after a few years through the influence of the judge of the court at which he had been tried.

While this remark, as has been said, was not before the jury at the time of their deliberation, yet it had been spoken in the attorney-general's plea, the jury had heard it, and it seems to have exerted an influence on the decision.

This is one of the things that often happens in trial by jury and is one that gives the uninitiated an idea that prosecuting attorneys are sometimes animated by a desire to convict a defendant, not alone because they think him guilty, but also because a verdict adds something to their prestige and reputation.

Furthermore, the decision of the jury, judged purely from a humanitarian standpoint, was a good verdict, for we cannot doubt but that if the choice were left to almost any man of whether he should be sent for life to state prison or the insane asylum, most of us would choose the former. Therefore, from this point of view, many will say that the jury did the best possible thing for the defendant, and yet there is another fact that enters largely into this view of the question, and that is, that as the verdict now stands the defendant stands convicted, in the eyes of his fellows, of the worst crime known to mankind—he is a condemned murderer, his name is anathema—and he, his family and his relatives are eternally branded with the disgrace. In this light it becomes a serious matter to convict a man of murder, even if he deserves the punishment, and consequently if the defendant was proved by the evidence to be insane and not responsible, a great injustice has been done to him and his. Moreover, if the death penalty had accompanied this verdict, we feel that more consideration would have been given to the medical expert testimony in the case, and a different verdict would probably have been rendered by the jury.

All that has so far been said is well enough in its way, many reasons like the foregoing could be brought forward to justify in a measure the verdict of the jury in this case, and yet to our mind the pith of the whole question has not yet been considered, for, as we understand it, the jury were sworn to try the defendant according to the law and the evidence and so far as we can judge this they failed signally to do.

The defense in this case set up the plea of insanity.

To prove the defendant's side of the case four experts in insanity, possessing the necessary knowledge and backed by large experience, gave their testimony. These four experts agreed that the defendant was insane that he was controlled by a delusion of persecution at the time of his murderous act and that consequently he was both insane and irresponsible. On these two points all the experts agreed and their testimony was not shaken or disqualified by the rigid cross examination. There has never been a case tried before any bar of justice in which the expert testimony was more conclusively all on one side, was more unanimously in agreement, and was less shaken by the counsel of the other side, and yet, in the face of this preponderance of testimony that the defendant

was insane and irresponsible, the jury, so far as those outside the immediate court can see, brought in a verdict directly opposed to the evidence. Moreover, the judge must have upheld the conclusion that the jury's verdict was right and just, for he promptly imposed the sentence of law which this verdict demanded.

We may be wrong, but judging from the fact that the jury were sworn to try this case entirely upon the law and the evidence presented, we do not see after a careful review of the testimony how the jury arrived at their remarkable verdict, and we cannot see any good reason why the judge should not have exercised that discretionary power which is vested in him, or ought to be, when the verdict rendered is contrary to the preponderance of evidence, and have set aside the verdict. Surely, medical expert testimony cannot have come into such disrepute in our courts as to warrant the jurymen in setting it entirely aside, and bringing in a verdict in direct opposition to the evidence.



#### Josiah W. Pearson, M. D.

Dr. J. W. Pearson died in Providence, R. I., Dec. 2, 1901. His death was due to an acute attack of appendicitis which had necessitated an operation.

Dr. Pearson was forty-five years old, was born in Morrill, Me., Nov. 7, 1856. He was educated in the schools of his native town and the Academy at Freedom, Maine, and received his medical degree at the University of Vermont in 1883. He began practice in his native town remaining there until 1891, when he removed to Camden, Maine. Later in 1898 he came to this city where he has been very successful, having obtained one of the largest practices in the city. The doctor was an exceptionally able man, both as a physician and surgeon. His great popularity was not only due to his ability, but his kindness and courtesy as well, and one never met him without admiring and loving him. He was a skilful practitioner, excellent scholar, and a perfect gentleman, and his loss will be deeply felt.

The doctor was a member of the United Order of Workmen in this city, and also of the Odd Fellows and Masonic Lodges, of Belfast, Maine.

DR. E. O. LIBBEY.





**AN AMERICAN TEXT-BOOK OF PATHOLOGY.** Edited by Ludvig Hektoen, M. D., Professor of Pathology, Rush Medical College, Chicago; and David Riesman, M. D., Professor of Clinical Medicine, Philadelphia Polyclinic. Handsome imperial octavo of 1245 pages, 443 illustrations, 66 of them in colors. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, \$7.50; Sheep or Half Morocco, \$8.50 net.

The importance of the part taken by the science of pathology in the recent wonderful advances in practical medicine is now generally recognized. It is universally conceded that he who would be a good diagnostician and therapist must understand disease—must know pathology. The present work is the most representative treatise on the subject that has appeared in English. It furnishes practitioners and students with a comprehensive text-book on the essential principles and facts in General Pathology and Pathologic Anatomy, with especial emphasis on the relations of the latter to practical medicine. Each section is treated by a specialist who is thoroughly familiar with his particular subject, and can frame the theories and conclusions in an authoritative form. The illustrations, which are nearly all original, and of which, 66 are in colors, are unsurpassed in beauty by those in any similar work in the English language. In fact, the pictorial feature of the work forms a complete atlas of pathologic anatomy and histology.

To the specialist, the general practitioner, the surgeon and the student this will prove a welcome book, for it is the most complete and exhaustive work on this important branch so far published, and reflects credit alike upon the authors and the publishers.

The book is well printed and strongly bound and has been said the illustrations are so clear and helpful as to make the text as plain as the demonstrations of a series of clinical lectures.

**SOLLMANN'S PHARMACOLOGY. A TEXT-BOOK OF PHARMACOLOGY.** Including Therapeutics, Materia Medica, Pharmacy, Prescription-writing, Toxicology, etc. By Torald Sollmann, M. D., Assistant Professor of Pharmacology and Materia Medica, Western Reserve University, Cleveland, Ohio. Royal octavo volume of 880 pages, fully illustrated. Philadelphia and London: W. B. Saunders & Company, 1901. Cloth, \$3.75 net.

This work aims to furnish, in a manner suited for reference and study, a scientific

discussion and definite conception of the action of drugs, as well as their derivation, composition, strength, and dose. The author bases the study of therapeutics on a systematic knowledge of the nature and properties of drugs, and thus brings out forcibly the intimate relation between pharmacology and practical medicine. Practitioners and students will find the work an admirable guide in that most important part of their equipment, namely, how to use drugs accurately and efficaciously. The book includes the practical subjects of materia medica, pharmacy, prescribing, incompatibility, toxicology, etc. A special chapter has been devoted to toxicologic analysis, including both the inorganic and organic poisons. Pharmaceutic assaying has likewise been given due consideration. There is also a section on laboratory experimentation, which, besides rendering the greatest aid to the student in the laboratory, will serve as a basis for classroom demonstrations. The book will be of the utmost service, not alone to students and practitioners, but also to druggists and everyone interested in the use of medicines.

The general arrangement of the book is excellent and the various subjects are in the main treated in a scholarly, scientific manner, but we are somewhat disappointed in the chapter on prescription-writing. While the general advice on this important subject is excellent, we feel that more attention should have been given in a work of this sort to the details of this subject. Moreover, the only prescription given in this department,—and which we conclude is the author's idea of a type of what a prescription ought to be—is written in the clipped latin form,—not showing the case endings,—a form which ought not to be perpetuated in the literature of pharmacology even if it is to be tolerated in the prescription-writing of a busy practitioner. To some this will seem a small matter, and yet slovenly prescription writing is one of the opprobrium of medicine, and consequently, an author who claims to treat the subject at all, should at least find time and energy sufficient to write his latin terms in full.

The book is well printed and well bound.

**THE LINDSAY-BLACKISTON PHYSICIAN'S VISITING LIST FOR 1902.** Fifty-first year of its publication. Published December, 1901. By P. Blackiston's Son & Co., 1012 Walnut St., Philadelphia.

The Lindsay-Blackiston Physician's Visiting List has so well stood the test of time and experience and has so many merits, that

it is not remarkable that the sales each year are very large and it has received the general endorsement of the profession.

This visiting list is concise and complete, is of convenient size for the pocket and so bound as to make a handsome and durable book. It is published in several sizes so that in price it is within the reach of all.

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AMERICAN EDITION OF NOTHNAGEL'S ENCYCLOPEDIA. TYPHOID AND TYPHUS FEVERS. By Dr. H. Curschmann, of Leipzig. Edited, with additions, by William Osler, M. D., Professor of the Principles and Practice of Medicine, Johns Hopkins University. Handsome octavo of 646 pages, illustrated, including a number of valuable temperature charts and two full-page colored plates. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, \$5.00 net; Sheep or Half Morocco, \$6.00.

The original German edition of this volume is universally recognized as the standard authority on the subjects of which it treats. The American edition, however, even surpasses the German, for, besides containing all the material of the original, extensive additions have been made to almost every chapter, thus incorporating into the work the very latest views on the subjects under discussion.

The chapter on Bacteriology has been thoroughly revised and much new material added, giving prominent consideration to the distribution of the typhoid bacilli, especially in the urine, the rose-spots, and the blood.

To the chapter on Pathology many minor additions have been made, incorporating the important work of Mallory. The literature on the localized lesions due to the bacillus has been carefully reviewed and made to conform to the most recent advances in that part of the subject. Thayer's exhaustive study of the state of the blood has been utilized, and the Surgical Aspects of Typhoid Fever have been fully revised with the aid of Keen's monograph.

Much valuable material has been added to the chapter on Diagnosis by Bacteriologic Methods, particularly with reference to the recent work in blood-cultures and on the detection of bacilli in the urine.

The chapter on Perforation and Peritonitis has been practically rewritten, as has also the section on the Hepatic Complications of Typhoid.

Thus it will be seen that the American edition of this valuable work, while still possessing all the commendable qualities of the original German, is greatly enhanced in its field of usefulness by being brought strictly abreast of the latest literature on the subjects, and by representative specialists.

All in all this is the most complete treatise upon these important diseases ever printed, and medical men owe a debt of gratitude to the physicians who have undertaken the translation, editing and revising of Notnagel's important work.

The book is a credit to the publishers, paper, type and binding being alike good.

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A TEXT-BOOK OF SURGERY. By Dr. Hermann Tillmanns, Professor in the University of Leipzig. Translated from the Seventh German Edition by Benjamin T. Tilton, M. D., and John Rogers, M. D., and Edited by Lewis A. Stimson, M. D. Vol. I, the Principles of Surgery and Surgical Pathology. With 516 illustrations. Published, 1901, by Messrs. D. Appleton & Co., New York.

The translation of Dr. Tillmanns' book is an important undertaking, and one that will prove of great benefit to American practitioners and students. The translation has been accomplished by physicians of known reputation and evidently well fitted for the work.

The present text-book is a translation of the seventh German edition and has been arranged in three volumes. The first volume is devoted to the general principles of surgery and surgical pathology, and furnishes a clear and comprehensive treatise of these important subjects. The first section considers the following subjects: Preparation of the patient for an aseptic operation; general and local anesthesia; measures to prevent loss of blood; general rules of surgical procedure and for the after treatment; drainage of wounds; suturing of tissues; amputations, disarticulations and resections; plastic operations.

Section II is devoted to antiseptic and aseptic protective dressings; the application of bandages and other retention-appliances; immobilization appliances and dressings and extension by weight.

Section III treats of inflammation and injuries, and includes also tuberculosis (scrofula) syphilis, leprosy, and actinomycosis; injuries and surgical dressings of soft parts; injuries and surgical diseases of bone; injuries and diseases of joints; military practice and gunshot wounds; and closes with a description of the growth, course, etiology, diagnosis, and treatment of tumors.

Any one who buys and reads this book will be convinced that it is an important addition to the literature of surgery.

With all due respect to the eminent scholars who have translated this book, it seems to savor somewhat of affectation to copy the English plan of retaining the "u" in such words as tumor and labor, and it seems to us it would have been more patriotic

to have substituted the letter "z" for the letter "s" in words that are commonly spelled with a "z" in this country.

Another small point: we don't like the use of the phrase "surgical interference" which constantly occurs in the text, for if the surgeon interferes we are sure he ought to break off the habit and reform. The book is a credit to the publishers for paper, type, and illustrations are all excellent.

**FIRST AID TO THE INJURED AND SICK.** By F. J. WARWICK, B. A., M. B., Cantab., Associate of King's College, London; Surgeon-Captain, Volunteer Medical Staff Corps, London Companies, etc.; and A. C. Tunstall, M. D., F. R. C. S. Ed., Surgeon-Captain Commanding the East London Volunteer Brigade Bearer Company; Surgeon to the French Hospital and to the Children's Home Hospital; etc. 16 mo. volume of 232 pages and nearly 200 illustrations. Philadelphia and London. W. B. Saunders & Co., 1901. Cloth, \$1.00 net.

This volume of practical information is intended as an aid in rendering immediate temporary assistance to a person suffering from an accident or sudden illness until the arrival of a physician.

The importance of first aid is indisputable as a life-saving expedient, for upon the promptness and efficiency of the aid first rendered the patient depends, in a great measure, the termination of the case.

The authors, fully appreciating the urgency of the subject, have succeeded in producing an admirable work of practical emergency procedures, and they have couched it in such clear and unequivocal language that even those entirely unfamiliar with the science may easily grasp the meaning intended.

It will be found a most useful book of ready aid, and of invaluable service, not alone to nurses, railway employees, etc., but also to the laity in general, as a book of indispensable first aids.

**A LABORATORY HAND-BOOK OF URINE ANALYSIS AND PHYSIOLOGICAL CHEMISTRY,** by Charles G. L. Wolf, B. A., M. D., Instructor in Physiological Chemistry, Cornell University Medical College, New York. Published by W. B. Saunders & Company.

This book is a course in physiological chemistry and examination of urine and stomach contents. The author has accomplished his purpose surely, but it is more adapted to the lecture room for an advanced class of students than for the practitioners of medicine.

The tests are clearly defined and extremely accurate and shows great research on the part of the author.

It would be a good work to follow if one wished to follow a course of research in this line.

**A SYSTEM OF PHYSIOLOGIC THERAPEUTICS. A Practical Exposition of the Methods, Other than Drug-giving, Useful in the Prevention of Disease and in the Treatment of the Sick.** Edited by Solomon Solis Cohen, A. M., M. D. Professor of Medicine and Therapeutics in the Philadelphia Polyclinic; Lecturer on Clinical Medicine at Jefferson Medical College; Physician to the Philadelphia Hospital, etc. Vols. III and IV—Climatology, Health Resorts, Mineral Springs. By F. Parkes Weber, M. A., M. D., F. R. C. P. (Lond.), Physician to the German Hospital, Dalston; Assistant Physician North London Hospital for Consumption, etc. With the Collaboration for American by Guy Hinsdale, A. M., M. D., Secretary of the American Climatological Association, etc. In two books. Book I,—Principles of Climatology, Ocean Voyages, Mediterranean, European and British Health Resorts. Book II—Mineral Springs, Therapeutics, etc. Illustrated with maps. Price for the complete set, \$22.00, net. Published, 1901, by P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia.

These are the third and fourth Volumes of Cohen's System of physiologic therapeutics, whose timeliness has already been commented upon. The first part treats of the factors of climate, with their effect on physiologic functions and pathological conditions, and describes the fundamental principles that underlie the application of climates, health resorts and mineral springs in the prevention of disease, and to promote the comfort and recovery of the sick.

The second part describes health resorts; and the third part discusses in detail the special climatic treatment of various diseases and different classes of patients. Book II also describes the health resorts in Africa, Asia, Australasia and America.

In Book I ocean voyages are first treated of with considerable detail and their advantages and disadvantages, indications and counter-indications as a therapeutic measure, are pointed out. As very little exact information on this important subject exists in an available form, this chapter should be of great use to physicians. The subject of altitude is treated in a similarly full and definite manner, and not only are we told what classes of patients and disorders are benefited by Alpine and Rocky Mountain climates, but also what classes are unsuitable for such treatment. The difference between Summer and Winter climates in Switzerland, and the therapeutic indications for the different seasons are discussed at length. In addition, the sea-coast and inland health resorts of the Mediterranean countries, those of Continental Europe and those of the British Islands, including mountain stations of various elevations, plains, and mineral water spas, are described, with no waste of words, but with a fullness of detail unusual

n medical books. Not only geographic and climatic features are pointed out, but also social and other characteristics so important in selecting a resort that shall be suitable to the tastes and means of the individual patient, as well as beneficial in his disease. Throughout this section allusion is made to the special medical uses of the various resorts described, and to the particular form of treatment for which any one is famous.

The existence of sanatoriums, for special diseases, as those at seaside resorts for scrofulous and weakly children, and in various regions for consumption, nervous affections, diseases of women, and the like, are specified; and the mere list of such places, as found in the index, are likely to prove invaluable for reference. We know none other so complete. A mere glance at the closely printed pages of the index will show how unusually full is the treatment of special resorts and their particular qualities. Like the preceding volumes these are thoroughly scientific and eminently practical, a combination that reflects credit alike on authors and editor.

**INTERNATIONAL CLINICS.** A quarterly of Clinical Lectures and especially prepared articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pædiatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and other topics of interest to students and practitioners. By Leading Members of the Medical Profession throughout the world. Edited by Henry W. Cattell, A. M., M. D., Philadelphia, U. S. A., with the collaboration of John B. Murphy, M. D., of Chicago; Alexander D. Blackader, M. D., of Montreal; H. C. Wood, M. D., of Philadelphia; T. M. Rotch, M. D., of Boston; E. Landolt, M. D., of Paris; Thomas G. Morton, M. D., and Charles H. Reed, M. D., of Philadelphia. With regular correspondents in Montreal, London, Paris, Leipzig, and Vienna. Volume 3, Eleventh Series, 1901. Published 1901, by J. B. Lippincott Company, Philadelphia.

The International Clinics is an excellent quarterly and this volume is especially valuable. As everybody knows, this quarterly is not a review nor a collection of clippings from recent literature, but each volume is made up of a series of carefully prepared clinical lectures written by men well qualified to speak on their special subjects.

This quarterly has given help to a large number of practitioners, and as arranged, printed and published it is a marvel of cheapness at the price of \$2.00 a volume. The subjects treated in this volume are conveniently arranged under the headings of Therapeutics, Medicine, Neurology, Surgery, Diseases of the Eye and Throat, and Laboratory Methods. While all the articles are instructive and well-written the following seems to be especially timely: Phototherapy

after Fensen's Methods; Antitoxin Sera, their Preparation and Standardization; On the Drawbacks to the Spinal use of Cocaine and the Accidents due to it; The Selection of Favorable Cases of Pulmonary Tuberculosis for Sanatorium Treatment; Exophthalmic Goitre; Phantom Tumor of the abdomen in a male; Clinical Treatment of Inebriety; The Localization of Nervous Lesions; Cerebellar Degeneration due to Intestinal Intoxication; Several articles on Appendicitis from a Surgical Standpoint; Several articles on Hernia; Some of the more common Diseases of the Tonsil; The Clinical Laboratory in Private Practice and in the Physician's office.

This volume is bound in the usual handsome and durable manner and is well printed and illustrated.

#### SAUNDERS' HAND ATLASES.

**ATLAS AND PRINCIPLES OF BACTERIOLOGY AND TEXT-BOOK OF SPINAL BACTERIOLOGIC DIAGNOSIS**, by Prof. Dr. K. B. Lehmann, Director of the Hygiene Institution in Würzburg and R. O. Newmann, Dr. Phil. and Med., Assistant in the Hygiene Institute in Würzburg. Authorized translation from the Second Enlarged and Revised German Edition. Edited by George H. Weaver, M. D., Assistant Professor of Pathology, Rush Medical College, Chicago, W. B. Saunders & Company Publishers.

This work includes two volume, Vol. I, like the others of the series of Hand-Atlases abounds in the usual beautiful plates while Vol. II is essentially a text-book.

This work is not a text-book for students, but is for advanced study and surely meets its object.

The text is divided into a general and a special part.

The general part takes up in a concise and comprehensive way the essentials of general bacteriology, which in itself is a grand work and great credit to the authors.

The special part treats of all the more important and many of the less important varieties of bacteria. Vol. I which is a collection of most beautiful illustrations accompanies this special part of Vol. II.

The arrangement and classification is especially good and each bacterium is taken up in a systematic order giving reference to plate in Vol. I, which has drawings of the bacterial growth on culture as well as stained preparation; microscopic appearance, staining properties; growth on various media, distribution and differential diagnosis.

The book is a valuable addition to a laboratory. It is, like the others of this series, bound in a neat fashion, has a good bold type and is an excellent atlas.



**\*The Purulent Rhinitis of Children as a Source of Infection in Cervical Adenitis.**

By CAROLUS M. COBB, M. D., Boston, Mass.

Mary E. B., age five years; was brought to my clinic at the Lynn Hospital, July 13, 1900, with enlarged glands on both sides of the neck, just below the angle of the jaw. The mother said that she had noticed the enlargement for about ten days and immediately following an acute coryza. The family history was good, none of the near relatives having had tuberculosis in any form. The throat was free from inflammation, and the tonsils were not enlarged or diseased, but the mucous membrane of the nasal chambers was covered with a dried mucopurulent secretion.

The history of the case is as follows: The child was free from disease of the upper respiratory tract for the first two years of her life. At the age of two years she had diphtheria, and, as the mother expressed it, she had had trouble with her throat and nose ever since. I saw the child when she was four, and she then had enlarged tonsils, adenoids and the purulent rhinitis of children. I removed the tonsils and adenoids. The operation was done under ether and was thorough. Following the operation the breathing was very much relieved, but the purulent discharge from the nose did not entirely cease, although it was much less.

To sum up the history of the case, a child without any history of previous trouble with the nose or throat has diphtheria at the age of two years, and has a purulent discharge from the nose following this attack; two years later enlarged tonsils and adenoids are removed, and one year after the operation she still has a purulent discharge from the nose and a cervical adenitis following an acute coryza.

I have selected this case because it is typical of a class of cases which the general practitioner sees every week of his professional life. We are all familiar with the open-mouthed, pale, partially deaf, inattentive and mentally backward child with half-opened eyes and an undeveloped face, and thanks to Wilhelm Meyer these children are no longer allowed to reach adult life handi-

capped by the effects of adenoid vegetations. That these growths may be the result of an infective disease in the nose or throat there can be no doubt, and it is equally true that the obstruction which they cause may tend to prolong a catarrhal condition in the nose. It is very probable that adenoid vegetations may be the source of infection in many cases of cervical adenitis, but it is not our purpose to discuss adenoid vegetations. That ground has been thoroughly worked out in the past, but in spite of the number of papers which have been written and the opinions which have been expressed, I still believe that there is something new to be said about the origin and effects of adenoids. Of late the tonsils have been thoroughly investigated as portals of infection through which cervical adenitis might originate, and the fact has been firmly established that many cases do originate in this way, but compared to the whole number of cases those caused by tonsillar infection are only a small percentage. There can be no doubt but that every case of adenitis in the cervical region is as truly the result of infection as adenitis in any other part of the body. Every physician today looks for the source of infection in each case where he finds enlarged glands, that is, he assumes at once that the adenitis is a symptom and not the primary disease, and while the inflamed gland may require attention, he directs his chief efforts to the cure of the primary disease. This is the rational and truly scientific method adopted in dealing with adenitis in every part of the body except in the neck.

It would be interesting to know how many operations for the removal or evacuation of enlarged or broken down cervical glands are done each year in this state alone. These operations are done with hardly any attempt to find the source of infection. If the patient has enlarged tonsils or adenoids these are removed, but the effort ends there, and the subsequent treatment of the adenitis is in direct opposition to modern surgical teaching. The plan of treating usually followed in dealing with cervical adenitis is the merest empiricism. The patient is given iron and cod-liver oil, because it is evident that he is suffering from sepsis, and various kinds of ointment are rubbed into the skin, and finally surgical intervention. Is it any wonder that these cases are protracted? But it may be contended that many of these cases recover with the treatment adopted or by the aid of surgery; this is undoubtedly true, but, on the other hand, it is equally true that many of them run a protracted course even after surgical intervention, and it may well be

\* Read before the Essex South Branch of the Massachusetts Medical Society, December 21, 1900.

questioned whether the final healing of the adenitis is due to the treatment directed to the glands or to the spontaneous healing of the source of infection. I do not wish to say anything that can in any way be construed as speaking against operations on the glands, because these operations are often necessary, not only for the health of the patient but for cosmetic purposes as well, but I do wish to enter an earnest plea for the treatment of these cases on the same lines that govern the treatment of adenitis in other parts of the body. The operation will, if thoroughly done, relieve the patient from the danger arising from the glands already involved, but it will not prevent the involvement of other glands unless the source of infection is found and healed. The source of infection which causes cervical adenitis is very probably in close proximity to the glands involved, that is, the mouth, throat, nose or ear. There is, however, a small percentage of cases which are caused by general systemic infection, although this percentage is not so large as is generally supposed.

When we come to consider the sources of infection in cervical adenitis, we are met with the generally accepted belief that these cases are practically all due to tubercular infection, and the meaningless statement that the child is strumous or scrofulous. The words *struma* and *scrofula* have come to occupy the same place in our conversation with the friends of the patient that was formerly occupied by "congestion of the portal circulation," which the late Oliver Wendell Holmes wished had not passed out of use, because "they sounded so well, meant so little, and were so satisfying to the patient," and while these words may still have a limited use for this purpose, it will be as well for accuracy of statement in medicine when they pass out of use altogether. If we mean tubercular infection, why not say so, and if we mean something else, why not say that as well? There is no evidence that any considerable proportion of these cases of cervical adenitis is due to tubercular infection. If they are due to tubercular infection, it must occur in one of two ways, either as a general systemic infection or as a local infection from the parts immediately surrounding the neck. If due to systemic infection it would naturally follow that we should find manifestations of the disease in other parts of the body, and if due to local infection we should find the original lesion, or the scar tissue, the result of the original lesion, at the point of entrance of the infection. From the well-known tenacity with which tubercle bacilli

persist in the tissues which they have once invaded, we might reasonably expect to find diseased tissue at the point of entrance, and this is what is actually found in many cases of diseased tonsils.

I do not intend at this time to discuss the whole subject of cervical adenitis, but I do wish, in this connection, to call your attention to the purulent or mucopurulent diseases of the nasal cavities as a possible source of infection. Perhaps this can be done in no better way than to analyze the course and symptoms of the case which I have given. The child was free from catarrhal disease of the upper respiratory tract for the first two years of her life; at least the mother, a very intelligent woman, says that she never noticed any trouble of that kind; then she had diphtheria, and has had so-called catarrhal disease of the nose and throat ever since. I saw her when she was four years old and she then had enlarged tonsils, adenoids and purulent rhinitis of children. I cleared the throat and the breathing was much relieved, but the purulent rhinitis continued, although it was much less. One year later she returns with an acute cervical adenitis following an acute coryza. In this case we have a purulent rhinitis as a direct sequel of the attack of diphtheria, and we have therefore two questions for solution: (1) What is the source of the purulent discharge from the nose, and (2) what causal relation, if any, does the attack of diphtheria bear to this discharge? In answer to the first question it may be well to make the statement that a chronic nasal discharge, with a few exceptions which I will give later, always has its source in the nasal accessory sinuses. The exceptions to this statement are the cases of foreign bodies or of dead bone, which is essentially a foreign body, in the nose, and syphilitic and tubercular disease. The foreign bodies produce a profuse, purulent discharge, while the syphilitic and tubercular disease produce a slight amount of discharge *per se*. I am well aware that syphilis is credited with causing a nasal discharge in a large number of cases, but if we take the trouble to differentiate the discharge caused by the actual syphilitic disease from that caused by the results of this disease within the nasal chambers, we shall be in a much better position to treat these patients intelligently. These results act as a predisposing cause of a nasal discharge in precisely the same way as obstruction to drainage from the cells produced by other causes act, or a sequestrum may be left after a destructive syphilitic inflammation of the bone, which acts simply as a foreign body.



It acquires no specific qualities on account of its origin and its complete removal has the same influence over the discharge that the removal of any foreign body has.

I will not go fully into a consideration of the predisposing and exciting causes of sinus disease as I have done it elsewhere very lately. What causal relation does diphtheria bear to this discharge? The relation of diphtheria of the throat or nose to sinus disease presents itself in one of two ways; either there may be a true diphtheritic membrane formed in the accessory sinuses, especially in the antrum of Highmore during the attack of diphtheria (Weichselbaum, E. Frankel, Dmochowsky), or the sinuses may be intensely inflamed during the course of the diphtheria without true diphtheritic infection, the inflammation being due to a secondary infection by other bacteria (Zuckermandl). Here, then, is the relation of the diphtheritic attack to the subsequent purulent discharge. In this case the attack of diphtheria was the exciting cause, but in other cases it may be acute coryza, influenza, croupous pneumonia, scarlet fever, measles, facial erysipelas, typhoid fever, cerebrospinal meningitis, foreign bodies in the nose, etc., in fact, any way in which infection may reach the sinuses. Infection having taken place and the discharge once established, absorption will sooner or later occur, and the lymphatics of the nose being directly connected with those of the neck, a cervical adenitis may result at any time, and unless the purulent rhinitis is cured the cervical adenitis will run a protracted course. The purulent discharge from the nose may not cause a cervical adenitis for some time, because the retained secretion is very largely contained in bony cavities, but it eventually denudes the mucous membrane over which it flows and then some condition, as an acute cold, blocks the flow of the purulent discharge and absorption of the retained secretion takes place. If the source of the infection is in the nose, as it evidently was in this case, as there was no inflammation of the throat and no tonsils to be seen, and no pockets around the throat to retain the products of inflammation and no evidence of tuberculosis, then the importance of treating the nasal disease does not need to be insisted upon. It seems hardly necessary to add that so long as the source of infection remains unhealed that it is hardly reasonable to hope to cure the adenitis. It is very true that the infected glands can be removed and the process stopped in them, but this does not prevent others from becoming involved, and one would hardly care to remove the whole

lymphatic system of the neck to prevent recurrence. It seems more in the line of modern surgical teaching to first find the source of infection, and to make the healing of this the objective point of the treatment. If this can be done, the treatment of cervical adenitis will be much easier, and its course much shortened, and while the removal of hopelessly involved or broken down glands will still be necessary, we shall be able to prevent the involvement of other glands.—*Boston Medical and Surgical Journal.*

#### The Use of Sulphide of Calcium as a Remedy.

Including the Opinions of Drs. H. A. Hare, David M. R. Culbreth and George F. Butler Expressed to the writer.

By SAMUEL E. KARP, M. D., of Indianapolis.

The favorable results from the use of sulphide of calcium are of sufficient importance to warrant its more frequent use. Success depends much upon the selection of cases in which it is especially adapted; this may be said respecting all remedial agents, but can be emphasized in this instance from the fact that sulphide of calcium has oftentimes been used indiscriminately and curative results have been looked for when it was an inappropriate remedy.

Furthermore, the selection of the preparation is an important consideration. If the drug is in a form that may deteriorate by exposure to air, the chemical change will produce an insoluble compound and hence is almost worthless. To obviate this difficulty I have used the gelatin coated pill. The cases in which it has met with favor are those in which there are indications of suppuration. As a preventative measure it is surely worthy of consideration. I have frequently seen pustulation aborted, and in some instances such as smallpox, the pustules did not appear characteristic; thus in two instances the diagnosis for a time was questioned, only to be cleared up by a history of the subsequent line of treatment.

Its use in the treatment of boils, furuncles, acne, eczema and glandular enlargements is followed by an improvement in the condition and usually a cure. In the nonspecific glandular lesions it may prevent suppuration or if not given sufficiently early, will hasten the climax of suppuration. In specific cases, it is an adjuvant to mercury and iodide of potassium.

In scrofulous cases it is valuable indeed. When good hygienic measures have been inaugurated and sustaining remedies admin-

istered together with a wholesome and nutritious diet, even then, oftentimes we can not discern the marked improvement desired; in such cases, it will be encouraging to note the benefit when sulphide of calcium is additionally used.

In scrofulous children, in which cervical and inguinal glands are large and indurated, due credit will always be given syr. iodide of iron and iodide of arsenic, but more rapid progress and a greater tendency to permanency can be obtained by the use of sulphide of calcium; in some instances, however, it may be wise to use one of the iodides mentioned with the latter remedy.

When we consider the various conditions of the scalp, eye, ear, nose and throat which appear in children affected with scrofula or whose parents perhaps are so affected, it would indicate that there is a large field for the use of the remedy. The dosage which I prefer is one-tenth to one-fourth grain for children and one grain in adult cases. In some instances it seems preferable to give small quantities each hour for twenty-four hours and then use the usual dose three or four times a day.

*Mercks Archives* in January, 1900, published an article by the writer in which the use of the remedy under consideration was given in detail, together with a report of a number of cases in which sulphide of calcium had a distinct appropriateness. Further use has been in a line with these reports, which is favorable. From the interest that I have taken in the use of this remedy, I recently sent a copy of the above mentioned article together with a request for an opinion in reference to the use of the remedy to Drs. H. A. Hare, David M. R. Culbreth and George F. Butler. These gentlemen are authors of some of our best text-books on materia medica and therapeutics and their replies will be of interest.

PHILADELPHIA, June 4, 1901.

*Dear Doctor Earp*:—In reply to your letter of June 1st, let me state that I am in support of your view in considering that calx sulphurata is a valuable remedy. The class of cases in which I think it does good are those in which there is a tendency to a development of pustular conditions in the skin.

Very truly yours,

H. A. HARE.

BALTIMORE, MD., June 11, 1901.

*My Dear Doctor Earp*:—My experience with calcium sulphide has been of varying character; in some instances it having done all that was even hoped, while in others,

yielded only disappointment. Usually, I believe our expectations are too great and incline to give it a larger range than are its possibilities. I am, however, convinced that it will avail much when employed in a restricted sense, and not promiscuously, to every scrofulous or glandulous condition, be the cause and complication ever so varying.

I am convinced that often trouble is in the neglect to differentiate the peculiar time, condition and quantity as demanded and then failing to get results, we may improperly decide it was worthless. I have known physicians to prescribe it, absolutely indifferent as to withdrawing all metallic solutions, sodium chloride, potassium chloride or iron sulphate and then to be quite out of concern with its curative power.

There are few remedies that give evidence more quickly when contraindicated and several doses usually suffice for the patient to express himself in accordance with his belief, whether it is having a good or ill effect. In my experience it is never well to continue it long for it is only a short while when one gets increased pulse rate and pus secretion, quickly changing to feeble pulse, weakness, debility, etc. In spite of its trite appreciation by some, I regard it as a valuable agent in knowing hands.

Thanking you for the confidence that prompted the appeal,

I am fraternally yours,

DAVID M. R. CULBRETH, M. D.

ALMA, MICH., July 1, 1901.

*My Dear Doctor Earp*:—I have never used calcium sulphide very much, although I have employed it in the treatment of boils with quite good success. I have seen it used in the hospital with which I was formerly connected in Chicago, so that I am convinced it is an efficient remedy in the class of cases you recommend it for. I wish I were better able to give you more information regarding the matter. My personal experience with the drug has been quite limited.

Very sincerely yours,

GEORGE F. BUTLER.

It seems apparent that sulphide of calcium is credited with a curative power but the channel of its usefulness is too confined and it deserves a wider scope. In a few suppurative processes the current reports show that it has proved an efficient remedy but there are many instances of a varying character in which its use will unquestionably be followed by good results.

In the case of felon, boil or styne probably its curative competency is conceded and it

might be well to bear in mind that the successive manifestations which so frequently occur are avoided in almost every instance.

In cases of purulent conjunctivitis and ophthalmia and also suppurative disease of the ear, I have noted splendid results from the internal use of this remedy; however, in such conditions the local applications of hydrozone, I consider very important. I am confident that many pus-filled cavities may, after evacuation, be cleansed with hydrozone and then by use of sulphide of calcium better results can be obtained than by some of the more common methods.—*The Medical and Surgical Monitor*.

#### Forceful Reasons.

Dr. Benjamin Lee, Secretary of the Pennsylvania State Board of Health, recent President of the American Public Health Association, and one of the foremost authorities on hygiene and contagious diseases, is emphatic in his declaration that vaccination should not be either avoided or postponed on account of the recent cases of tetanus, and gives the following reasons to support his advice:

"First, the Camden epidemic of tetanus is purely local.

"Secondly, cases of tetanus have recently developed there in persons who have NOT been recently vaccinated.

"Thirdly, during the same period half a million or more persons have been vaccinated in the city of Philadelphia and its suburbs, and among these not a single case of tetanus has resulted.

"Fourthly, the germ of tetanus does not exist in vaccine virus.

"Fifthly, if tetanus occurs in a recently vaccinated person, not presenting any other wound or abrasion of the surface, it is because proper precautions have not been observed for ensuring cleanliness, both in the act of operating and in the subsequent care of the wound.

"Sixthly, smallpox is still increasing, and to suspend vaccination at the present time would be most unfortunate, as it would undoubtedly favor the spread of that disease."

A number of newspapers have been misinformed and have seriously alarmed the people against vaccine and vaccination. Unless the public is promptly enlightened as to the real cause and the necessity of general vaccination and in keeping the vaccinated parts clean, the health authorities will find it impossible to protect the communities against smallpox epidemics.

Your attention is directed to the following editorial appearing in the Philadelphia *Eve-*

*ning Telegraph*, Nov. 18th, on "Tetanus and Its Cause:"

"It is to be expected that the anti-vaccinationists will make the most of the unusual number of cases of tetanus which have recently been reported in Camden, in nearly every one of which the victim had previously been vaccinated. It should be borne in mind, however, that the connection between the process of vaccination and the attack of lockjaw, as cause and effect, has not in a single instance been established. If tetanus were a frequent sequel of vaccination, the latter would long since have been abandoned as a preventative of smallpox; it would have been a startling case of a remedy worse than the disease, and would never have received the endorsement of intelligent physicians.

"Endemic, or purely localized, outbreaks of tetanus on an alarming scale are frequently noted in medical annals; they are the result of local conditions favorable to the terrible malady which are to be found in the soil and the atmosphere, and are no more to be charged simply to vaccination than they are blamable upon the procession of the equinoxes. If a vaccinated patient is properly treated and ordinarily careful, he runs no possible risk of developing tetanus, even in a place where the conditions are as deplorable as happens, unfortunately, to be the case in the city across the river just at present.

"The wound made to receive the vaccine matter must be kept protected and clean; it should not be needlessly exposed to the germ-laden atmosphere, and, above all, it should not be rubbed over by grimy fingers, either those of the patient or of a curious friend. If there has been a single case of tetanus, in Camden or elsewhere, which has had any connection whatever with a preceding process of vaccination, it can be traced to a neglect of one or other of these simple and reasonable precautions. Tetanus does not follow vaccination any more than it follows smallpox; but where the atmosphere, the soil and the dust are impregnated with the fatal germs, as must be the case in Camden at present, it is possible that anyone may be attacked who has a wound, a mere scratch, or even an abrasion of the skin from a bruise on his person—provided, always, the proper precautions guarding against it are not taken."

From New York comes the news that twenty people were poisoned by eating crullers and doughnuts purchased at a certain bakery on Tenth avenue. The baker had used a new baking oil the day before. None of the cases proved fatal.

**Pathological Physiology of the Animal Heat Economy and its Relation to the Modern Theories of Fever.**

By ISAAC LEVIN, M. D., New York.

An animal body is normally warmer than the medium which surrounds it. This is true not only of the warm-blooded animals, but of the cold-blooded as well, whose temperature is higher than that of the medium, though only a small fraction of a degree. The only difference that exists between them is that the latter change their temperature with that of the medium, while the warm-blooded animals keep their temperature constant, with very slight periodical variations, whatever may be the change of the temperature of the medium. The first are called, therefore, poikilothermic (animals of varied temperature), and the latter homoiothermic (animals of constant temperature).

For a warm-blooded animal, as well as a human being, this constancy of temperature is an absolute necessity for the continuation of life. As certain bacteria can grow only at a certain temperature, so is a human being able to live only when his temperature has not gone below  $34^{\circ}\text{C}$ ., or above  $42^{\circ}\text{C}$ .. Further, even in these narrow limits, the organism is in an entirely normal condition only when its temperature is  $37^{\circ}\text{C}$ ., or very near it, otherwise it must be considered pathological.

The pathological physiology of animal heat, in its every phase, is so closely connected with the normal that the study of the first cannot be begun without at least a superficial perusal of the normal physiology of animal heat.

Physics teaches us that heat is one of the forms of energy innate in every substance or body. A certain state of such a body with respect to heat, in comparison with other bodies or substances surrounding it, is what we call temperature. A certain temperature is consequently only a comparative quantity, and does not show at all the real amount of heat in a body. On the contrary, physics has shown that in order to raise the temperature of different bodies one degree we need different amounts of heat. The real amount of heat is measured by another unit, the calorie, *i. e.* the amount of heat necessary to raise one kilogram of ice-cold water  $1^{\circ}\text{C}$ . (small calorie means the amount necessary for one gram of water).

As has been mentioned before, every organism needs a certain amount of heat to exist. But a warm-blooded animal has al-

ways, under ordinary circumstances, more heat than the medium it is in; consequently, by the law of physics, it must constantly distribute part of its heat to that medium. It is self-evident that the organism cannot retain its constant amount of heat without just as constantly acquiring or producing new amounts of heat. What are, then, the sources of animal heat?

The food introduced into an organism undergoes different analytical changes until its final oxidation into  $\text{CO}_2$ ,  $\text{H}_2\text{O}$ , and urea. During these processes a certain amount of energy is freed, of which a smaller part manifests itself in different work of the organism, and a great deal larger part in heat. This amount of energy will be the same whether some organic matter will be immediately oxidized into  $\text{CO}_2$ ,  $\text{H}_2\text{O}$ , and urea, or it will previously undergo some intermediate stages before its final oxidation.

Food, or, rather, the process of its metabolism, is practically the only source of animal heat in the normal state of the organism. The fact that a starving organism is able to preserve pretty nearly its normal temperature for a certain time does not refute this theory. It only shows that a starving organism oxidizes some constituents of its own body, thereby freeing at least some amount of energy. This can be seen from the fact that a starving organism constantly loses its weight.

This influence of food on the production of heat in the organism must not be construed in such a manner that the amount of heat simply depends on the amount of food taken. Mechanics proves that in order to produce a certain amount of work, every machine needs a far greater amount of potential energy, the rest of which manifests itself in heat. The animal organism is the most economic machine in this respect, and still it is able to use only about a fifth of its energy for actual work (Rubner). There is some work that an organism is always bound to perform, for instance, the work of the heart, glandular system, and so on, and all of this increases the amount of heat production. Far greater yet is the influence of the work of the muscular system on the production of heat (Roehring and Zuntz). It is a well-known fact that an hour or so of a good run may raise the temperature of the body as high as two degrees. We can see, then, that an organism at work produces more heat than one resting. They may both consume the same amount of food, but the latter organism will oxidize and realize the energy of only a part of the food, while the rest of the food will

undergo some preliminary changes (into fat, for instance), and with a part of its energy will be left over, so to say, in storage. The working organism, on the other hand, will fully oxidize and use up all the energy of the food ingested.

It easily follows from this that the measuring of the heat produced in an organism is closely connected with the knowledge of the amount of food oxidized in the organism. This measurement can be accomplished in one of the following ways :

1. Determine during a rather long period of time the amount of food necessary to keep a certain organism perfectly balanced in regard to the state of its heat and its weight, and then measure the potential energy of that food.

2. Determine during twenty-four hours the amount of food introduced into an organism and the amount of the products of metabolism eliminated; measure the respective energy, and the difference between the two last determinations will show the amount of heat produced in the twenty-four hours.

3. Determine the respiratory coefficient or the relation between the formed  $\text{CO}_2$  and consumed  $\text{O}_2$ . This is the best method of determining the heat production.

Lavoisier, and later Pflueger and Voit, have shown that an animal put in an atmosphere of pure oxygen consumes not more of it than in an ordinary atmosphere. The amount of oxygen consumed depends only upon the amount of the metabolism in the body. Consequently, by the amount of the oxygen consumed we can judge the amount of food oxidized, and thereby the amount of heat produced in the body. But different foods require different amounts of oxygen in order to be oxidized to their last products of decomposition; 100 gm. of  $\text{O}_2$ , for instance, can oxidize 85 gm. of fat, 84.4 gm. of carbohydrates, 74.4 gm. of albumen. We must, therefore, determine also the amount of eliminated  $\text{CO}_2$ , as the relation between these

two agents  $\left\{ \frac{(\text{eliminated } \text{CO}_2)}{(\text{consumed } \text{O}_2)} \right\}$  is fairly constant for every kind of food; we shall then be able to determine what kind of food was oxidized, and what quantity of it. Having determined this, we can easily infer the amount of potential energy, and consequently of heat, produced within the body. It has been calculated that there is constantly produced within our body an amount of heat sufficient to raise our temperature two degrees an hour, or forty-eight in twenty-four hours. It is obvious that this amount of heat would be sufficient to burn the organism

if it were not constantly distributed into the surrounding medium.

Like every other physical body of a temperature higher than that of the surrounding medium, an animal organism loses its heat through radiation and conduction. This loss takes place at the surface of the body only, and depends upon the relative size of the surface and the weight of the body; smaller animals, therefore, lose more heat for every kilo of their weight than do larger animals. The difference between this distribution of heat through radiation and conduction in an inanimate body and that in a living organism consists in the ability of the latter to change the temperature of its surface, and consequently the amount of heat lost, by means which will be shown later.

It will be appropriate to mention here that in a human body the clothing has a great influence upon this loss of heat. The heat from the skin is transferred to the so-called inner atmosphere, or to the air existing between the skin and the clothing. The last being a worse conductor of heat than the skin, there is always a part of the distributed heat left over in the inner atmosphere, the temperature of which is consequently higher and more even than that of the atmosphere surrounding it. This fact is of great importance, as we would be otherwise unable to withstand the great climatic changes. All other animals are protected by felt, fur, or feathers, that are all worse conductors of heat than human skin.

Besides radiation and conduction, there are some other means by which animal heat is lost. The most important of them is the evaporation of the water secreted through the perspiration of the skin and with the expired air. Such evaporation is always accompanied by an expenditure of a considerable amount of heat. And lastly, some part of animal heat is consumed in warming the air and food we are taking in.

The full amount of heat lost by an animal during a certain period can be measured by an apparatus called a calorimeter. There are two kinds of such apparatus in existence, the water-calorimeter and the air-calorimeter. The idea of the water-calorimeter is as follows: An animal is placed in a metal box with double walls. The space between the two walls is filled with a measured amount of water. The heat lost by the animal warms the water. Knowing the difference in the temperature of the water before and after placing the animal in the box, and the amount of water, we can measure the amount of calories consumed by the water, and con-

sequently lost by the animal. The outer wall of the apparatus is covered by a non-conductor of heat, in order that the heat of the water may not be easily lost in the atmosphere.

Recent researches of D'Arsonval, Rosenthal, and Rubner show that the air-calorimeter is a great deal more sensitive, and gives better results. The construction of this calorimeter is based upon the physical fact that heating a gas always increases its volume, or, if that gas be inclosed in a certain space, increases its pressure. The air-calorimeter is also a box with double walls, but in the space between the two walls there is air connected with a manometer. When an animal is placed in the box it raises the temperature of the air between the walls to a certain degree, raising thereby at the same time its pressure to a certain amount, and this is shown on the manometer. The manometer is measured previously by placing in the box a hot object, of which the loss of heat was determined beforehand.

We have previously mentioned that the difference between the poikilothermic and the homoiothermic animals consists in the ability of the latter to keep a nearly constant temperature, notwithstanding the different conditions the organism may be in with regard to the amount of heat produced and lost. There must be, no doubt, a very sensitive mechanism which can effect such constancy of the temperature of a homoiothermic animal. To get a clear understanding of this regulative mechanism, we must know, on the one hand, its nature, and, on the other, the ways and means of its action. The latter part of the question is a great deal easier to comprehend, and has consequently been worked up better; we will therefore begin with it.

Let us consider a case in which, for some outside reason, say the low temperature of the surrounding atmosphere, a greater amount of heat has to be lost from the surface of the body. The regulative mechanism works against it in the following manner: Through the circulation of the blood, heat is constantly transferred from the internal parts of the body to its surface. Under the influence of cold, the minute blood-vessels of the skin contract, the amount of blood passing in a certain time through the skin, and thereby the amount of heat, is lessened. Consequently, the temperature of the skin, which is always lower than the inner temperature of the body, becomes lower still. The loss of heat through conduction depends

upon the difference between the temperature of the atmosphere and the surface of the body; it diminishes, consequently, under the influence of cold. The perspiration of the skin and the resultant evaporation of water cease entirely. All this tends to decrease the loss of heat. Besides this, the production of heat increases under the influence of cold. An animal under the influence of a low temperature digests a greater amount of food in general, and more fat in particular, the latter producing more heat by its oxidation than any other food; there are more voluntary muscular contractions, as well as involuntary ones in the form of chills, which are fibrillary contractions of the whole muscular system. Pfuege and Zuntz have endeavored to prove that there is also, under the influence of cold, an increase of metabolism in the muscles independent of their physical work; in other words, that cold increases the chemical tonus of the muscular system. But this has been since disputed, as they could not exclude in their experiments the smallest fibrillary muscular contractions.

Exactly the contrary takes place if the temperature of the atmosphere increases. The blood-vessels of the skin dilate, thereby bringing a greater amount of heat from the internal organs to the skin, which increases the amount of heat the skin loses through conduction. The secretion of water by the skin and lungs increases; consequently, a greater amount of heat is lost by evaporation. The animal digests less food, lies still, without any muscular movements, which all tends to decrease the heat production.

All these physiological actions of the circulatory, muscular, and glandular systems before mentioned, by the aid of which the heat of the organism is regulated, are themselves under the influence of the nervous system. The regulative mechanism of heat itself is so sensitive that there can be no doubt as to its nervous nature.

But is there a part of the nervous system that has for its office the regulation of heat, and if so, where does it lie?

This question is far from being answered conclusively as yet. The most striking proof that the constancy of temperature of the homoiothermic animals is produced by the influence of the nervous system is given by the experiments of Zuntz and Pfuege, showing that a curarized animal, or an animal whose spinal cord has been severed between its cervical and dorsal parts, becomes practically poikilothermic, and changes its temperature with that of the atmosphere,



This explains the seeming disagreement between the earlier works of Fischer, who found a decrease of temperature after severing the spinal cord, and those of Tscheschichin and Naunyn and Quinke, who found even a slight increase if they covered the animal or put it into a warm medium. All these works certainly do not show any specific influence of the nervous system on the production of animal heat. The severing of the spinal cord produces a dilatation of the blood-vessels and a paralysis of the muscular system, thereby increasing the loss of heat and doing away with the most important source of heat production.

We find far greater difficulty when we search for the influence of the brain upon animal heat.

Tscheschichin and Wood found that an injury of the brain between the pons and medulla raises the temperature of the animal, and they promulgated the theory that there must be near the pons a nerve center, whose function is to inhibit or repress the production of animal heat, the injury of which increases this production. But the constancy of this phenomenon was refuted by Rosenthal and others. Landois and Eulenburg, Hitzig and Wood have also shown that injury of the motor regions of the brain raises the temperature of the body; but this fact seems to throw little light upon the rôle the nervous system plays in the regulation of the animal heat, for such an injury produces in the animal epileptic convulsions, which are alone sufficient to raise its temperature. A great deal more promising seem to be the investigations of the deeper parts of the brain. Aaronson and Sachs, Richet and Ott have almost simultaneously shown that a lesion of the corpus striatum near the nodus cursorius, and of the adjacent places of the brain, raises the temperature of the body three or four degrees. This increase of the temperature may last for three or four days, and does not depend upon the temperature of the medium surrounding the animal. It is sufficient to prick this place in the brain with a needle to raise the temperature, and the experiment can be repeated on the same animal with the same result. The deeper a needle goes in, the higher will be the temperature.

White has found later some other places in the brain injury of which produces the same effect. In other places of the brain, again, the effects of such an injury would be to lower the temperature (Ott). We can now see that, though the last-mentioned works do not seem to leave any doubt that

the brain has a direct influence on the regulation of the animal heat, we are still unable to determine whether there is a special center for it, or whether different parts of the brain, through their influence upon the circulatory, muscular, or other systems, do the work of regulating the animal heat. Just as little is known through what channels, through what kind of peripheral nerves, this regulation is produced. Cl. Bernard's "nerfs frigorifiques et calorifiques" are not proven to be special nerve fibers transmitting heat reflexes, but are most probably vasomotor nerves.

The constancy of temperature, as we have mentioned already, is an absolute necessity for normal animal life. Temperatures above or below the normal show that the organism is in a pathological state. The temperature depends upon the relation between the heat produced and lost, and this, in its turn, upon the relation between the animal heat and amount of heat in the surrounding atmosphere. Consequently, the decrease and rise of temperature may depend upon the changes in the temperature of the atmosphere or in the amount of internal animal heat.

The capacity of an organism to regulate its state of heat against the influence of low atmospheric temperature is limited; if this temperature is too low or if its influence continues too long, the organism must undergo certain pathological changes. The action of the heart of such an animal becomes very slow, the arterial pressure low, the breathing frequent and superficial; the secretion of urine decreases, the reflexes cease, there appears a general paralytic state of all the organs, and at last the animal dies in convulsions. These facts are proven to be true clinically, as well as experimentally, in the case of animals put into ice-boxes, or into whose veins a cold physiological salt solution is injected (Horwath, Walter and Knoll). The action of a low atmospheric temperature on the organism, a so-called "cold," was considered of the greatest importance in pathology before the science of bacteriology was developed. The origin of almost all acute infectious diseases was ascribed to its influence. But with the advent of bacteriology there seemed to be a tendency to deny the influence of a "cold" entirely, though this certainly controverted long clinical experience. Such an influence upon the organism of a rapid decrease of the temperature of the atmosphere certainly exists, though this decrease is not always great enough to injure the organism directly. There are a great many theories in existence explaining the

influence of a "cold" on the organism, as, for instance, that the decrease of the atmospheric temperature injures the action of the skin, that it irritates the sensitive nerves, alters the tropic nerves, etc., but none of them is capable of explaining fully the phenomenon. Lately, Lipari, Filehne, and Lode have proven experimentally that animals previously cooled off yield to bacterial infection easier than normal animals. Thereby the existence of a "cold" is proven not only clinically, but experimentally as well, though we still do not know its mode of action. Possibly the influence of a rapid decrease of atmospheric temperature consists in decreasing the force of resistance of the animal cells against the bacteria and their toxins.

There are, also, undoubtedly pathological conditions, when the temperature is below the normal, consisting in some lesion in the regulative mechanisms. At least, the most plausible explanation of the death of animals after extensive burning, or experimental varnishing of the skin, is the cooling off of the organism through an abnormal loss of heat. Falk has proven experimentally that the loss of heat after the burning of the skin is increased, and Valentine and Winternitz have also proven that the death of an animal after varnishing the skin can be delayed, and even stopped, if it is put into a warm medium.

But temperatures above normal are of much more importance in pathology. They can also be produced by an outside cause, i. e. the high temperature of the surrounding atmosphere.

Rosenthal has shown experimentally that, if we put an animal in a box and raise its temperature above 32° C., the temperature of the animal increases to about 41° or 42° C. The animal lies still, the peripheral vessels are dilated, and the pulse and breathing are accelerated, though the last is more superficial. If the temperature of the box is raised 40°–42°, then the temperature of the animal increases to 42°–45°, and it dies under symptoms of general paralysis, exactly with the same symptoms we meet in cases of isolation or sunstroke, where an organism is just as abruptly put under the influence of an atmosphere with an unusually high temperature as in the experiment.

Besides the symptoms of the high animal temperature produced by a high temperature of the atmosphere, which we mentioned already, it will be interesting to state that Simanowsky has shown experimentally, and P. A. Levene on sunstroke patients, that, notwithstanding the high animal temperature, the N. elimination, and consequently the

metabolism, is not increased. Richter, however, has refuted Simanowsky's results.

The causes of death from overheating cannot be clearly defined as yet. Cl. Bernard believed that coagulation of muscular albumin (myosin) was the direct cause of death, but this theory was refuted by Heubel, who proved that a heart that has stopped beating under the influence of very high temperature (45–50°) if cooled off may begin to beat anew. More probable seem to be the opinions of Ide, who says that through the influence of overheating the work of the heart is arrested by the action of some toxic substances accumulated in its muscular tissue, without its morphological structure being injured, and of P. A. Levene, who thinks that the symptoms and death from sunstroke are due to auto-intoxication of the organism.

#### FEVER.

We turn now to the study of the pathological increase of the animal temperature, due to causes emanating from the organism itself. Hippocrates and Galen recognized such a "*calor præter naturam*" as a disease, and called it *πυρετός*, *febris*, fever. Formerly, fever always meant a certain disease manifested by an elevation of the temperature, changes in the action of the heart and lungs, altered metabolism, and morphological changes in the parenchymatous organs. But all these symptoms accompany so many entirely different pathological processes that there can be no doubt in anybody's mind that a great variety of processes, often having nothing in common among them, are called by the same name—fever. What else but the name is there in common between hysterical fever and the fever in malaria, for instance? A great many pathologists have endeavored to correct the misuse of the word fever.

It is easily comprehensible that fever does not mean a certain disease, but a certain pathological condition of the system, that may be the result of or simply accompany a great many different diseases. Of all previously mentioned manifestations of fever, the elevation of temperature is the most important, for where there is no high temperature there is no fever. Fever, consequently, is a diseased state of the heat economy of the organism, in which the temperature of the body is raised above the normal.

The question arises, now, whether every elevation of temperature can be called fever. It seems somewhat unwarrantable to assume that a person who has been running for some time, and has thereby raised his temperature

one or two degrees, is in the same pathological condition as one having malarial fever. Different measures have been, therefore, taken to differentiate one kind of elevation of temperature from another. The best of these would seem to be the one expressed by Liebermeister and, later, developed by Filehne, Richter, and Stern. They hold that there exist simple elevations of temperature, and febrile ones. A febrile elevation of temperature, or fever, they consider to be present only in cases in which the temperature is not only raised but leveled on this raised point. What they mean by it is as follows: If we forcibly reduce the temperature of a person with a simple elevation of temperature by some agent, we can reduce it to the norm, and it will remain there, even after the agent has ceased to act; while if we do the same with an individual having fever, the temperature will not sink entirely to the norm, and will rise again to the former height as soon as the agent has ceased to work. In other words, the organism, in its febrile state, just as strenuously opposes the reduction of its high temperature as the normal organism does the reduction of its normal temperature, while an organism in a state of simple elevation of its temperature begins the work of contra-regulation only after the temperature has been reduced to the norm.

Liebermeister first based the construction of this theory upon the fact noticed by him that a fever patient in a cold bath preserves as far as possible his high temperature, and very soon after the bath the temperature attains the point it had before the bath. Loewy and Kichter have tried to prove that there is an actual qualitative difference between these two kinds of elevation of temperature by the fact that, while they have often found the alkalinity of blood increased in febrile elevations of temperature, they have never found it in the simple ones.

This theory is ingenious, but it does not seem to introduce any qualitative difference between the two kinds of elevation of temperature, but simply a quantitative one.

Should we agree that fever is, in the first place, a pathological state of the heat economy, and that all the other manifestations in fever are the result of the high temperature or else simply accompany it, and that there is no fever without a high temperature, then we must admit that fever is produced by some cause affecting the different heat-regulating mechanisms. Now if, in one case, such a cause gives a certain shock to the regulative mechanism, and then ceases its

action, while in another case the cause acts continually, it is self-evident that in the first case the temperature will be easily reduced to the norm, while in the other it must remain at its high level, because the regulative mechanism receives the second shock before the antipyretic has had time to act. The difference, consequently, does not lie in the nature or the different fevers, but in that of the causes producing them. The difference in the alkalinity of the blood is, in the first place, not definitely proven yet, and it is not proven whether it has anything to do with the febrile elevation of temperature in any case.

But as long as we do not find any qualitative difference in the various elevations of temperature, as to their nature or as to the influence they produce upon the organism, we must coincide with the opinion of Unverricht, that every elevation of temperature must be called fever; but we would add, every elevation of temperature due to causes emanating from the organism itself. In this way we exclude all elevation of temperature due to overheating, and, except the cases of slight elevation of temperature due to muscular work, the name of fever will apply to the same thing in general pathology as in clinical medicine.

None the less, fever appears in different forms, and has to be subdivided. Falkmann's subdivision of fever into simple and complicated seems to suit the purpose best. The simple fever of Falkmann corresponds to the simple elevation of temperature of Liebermeister (not perfectly, though), and includes fever in the course of some nervous diseases, in simple fractures of bones, in anæmia, and so forth; while the complicated fever of Falkmann, or the febrile elevation of temperature of Liebermeister, includes, in the first place, fever in infectious diseases.

As was mentioned above, the difference between the fevers consists in the difference between the causes producing them. The study of these causes is of the greatest importance for the understanding of the whole process, but before we begin it we must try to show in what way these fever-producing or so-called pyrogenic agents must act in order to cause fever.

An elevation of the temperature can be caused by increasing the production of heat, by decreasing the loss of it, or by different combinations of both. Lavoisier, who has shown experimentally that respiration represents the act of combustion of organic substances of the organism, has expressed the opinion that fever is produced by an in-

creased combustion, or, what is the same thing, by an increased formation of heat. The experimental development of this theory is due to the works of Liebermeister, Pflege, and Leyden, and their followers. Liebermeister has shown that a patient with a temperature of  $106^{\circ}$  F., put in a bath with a temperature of  $86^{\circ}$  F., loses 198 calories of heat (calculated by the change of the temperature of the water), while his temperature decreases only about  $2^{\circ}$  F., which indicates a loss of about 38 calories of heat (taking the heat coefficient of the body at 0.83.)

On the basis of this fact, Liebermeister comes to the conclusion that there exists in fever a constant overproduction of heat, which would account for a part of the heat lost in the bath. To the same conclusion also came Pflege and Leyden through finding the respiratory coefficient increased in experimental fever. Now, this increase in the production of heat is certainly not sufficient to explain entirely the phenomena of fever. In the experiments of Liebermeister, the increase of heat production might have been due not to the fever itself, but to the influence of the cold bath. As to the increase of the respiratory coefficient, Krauss has proven that it is too small to explain the temperature in fever. Traube was the first to show the weak points of this theory and the great importance the change of the loss of heat has in fever. He drew his conclusions from cases in which fever begins with an acute chill. The following is the explanation he gives of the origin of fever: Under the influence of some pyrogenic cause, the small arteries of the skin contract, thereby lessening the amount of heat coming to the surface from the internal organs, as well as the amount of heat dissipated. With him, consequently, fever is simply a heat stasis in the internal organs of the body produced by a decreased loss of heat. In fever, not accompanied by a chill, he accepts the same mechanism, only working not so abruptly. But the increase of the loss of heat alone is just as little able to explain the febrile elevation of temperature as is the increased production of heat alone. This fact is admitted by modern experimenters, no matter whether they adhere to Liebermeister's or to Traube's theory. So, for instance, Senator and Rosenthal have admitted a certain influence of the increased heat production in fever, though the decreased loss of heat is with them the most important factor in producing it. On the other hand, Leyden, an adherent to Liebermeister's theory, admits a decreased loss of heat, though he ascribes it not so

much to the contraction of the cutaneous arterial system, as to the retention of water in the organism, when there is no sweating or any other loss of water in the febrile state of the organism. From a study of the above-mentioned, as well as a great many other works on the subject, the following conclusions can be drawn: In the first stage of fever (*stadium incrementi*), the most important factor really consists in the decreased loss of heat through the contraction of cutaneous vessels. At the height of fever (*fastigium*), the loss of heat is even increased sometimes, but the production of heat is always so much increased that it covers the increased loss, while in *stadio decrementi* the loss of heat is higher than the production, the retained water is freed, and as a consequence of all this the temperature falls.

We see now, that the mechanism of fever is very complicated; the causes producing it cannot act simply by increasing the production of heat or decreasing its loss. We have seen already that in a normal organism an increased production of heat by whatever cause is immediately contra-regulated by as great increase in the loss of heat, and vice versa, while in fever very often just the contrary takes place. All this can only be explained, if we admit with Tschischin, Wood Aaronson and Sachs, and others, that the fever-producing agent affects primarily the regulative mechanism in the central nervous system, changing its action in such a manner as to produce an increase in the temperature.

We have seen already that the name fever does not imply a uniform pathological process, and that the agents producing fever must also be of differing nature. In studying the agents producing different kinds of fever, we must always keep in mind Falkmann's classification into septic, or infectious, and aseptic fevers. In infectious fevers the causes of the elevation of the temperature, as well as of the diseases themselves, are closely connected with the micro-organisms producing them. The action of these micro-organisms does not consist in any mechanical influence produced on the organism by their presence, but in the toxic action of the products of their metabolism. This can be proven by the fact that a sterile culture of fever-producing micro-organisms can also produce fever. Further, Bergmann and Brieger extracted from such cultures chemical substances that were able to produce the same pyrogenic action as the cultures themselves. Ughetti, on the basis of his observation of malarial and recurrent fevers, comes to the conclusion that the action of micro-organisms

consists in the mechanical breaking up of the red blood corpuscles, and the resultant detritus in its turn mechanically produces fever, but he does not give any experimental proof of this theory, neither is it supported by anyone else.)

It must be borne in mind that a substance producing fever in a certain infectious disease, and the substance producing the pathological process itself, are not the same, as can be seen from the fact that some micro-organisms are not pathogenic at all, in the usual sense of the word, and they still produce fever. Neither are pyrogenic substances in the different micro-organisms of the same nature. Krehl has shown, for instance, that the action of the pyrogenic substances in some microbes decreases under the influence of heat, while in others it does not. Centanni's opinion that fever is always produced by the same substance, "pyrotoxin," has not been confirmed. Buchner and Krehl hold that a pyrogenic substance is always some kind of an albuminous substance, a toxalbumose, constituting a part of the body of the micro-organism; therefore a dead culture is also able to produce fever, as, for instance, in the case of Koch's tuberculin. We see, consequently, that infectious fever is a certain kind of intoxication affecting the heat-regulating mechanism of the nervous system.

But it seems that even in a great many of the so-called aseptic fevers (in subcutaneous traumas, blood diseases, etc.) the same explanation is the most plausible. At least, it has been shown that fever can be produced by a subcutaneous or intravenous injection of aseptic organoextracts (Paulsen). Krehl tried, with the same object in view, a great variety of albuminous substances, but he could not come to any conclusive or uniform results. The most satisfactory results seems to give albumoses. Mathes has proven that not only are these albumoses able to produce fever, but that they are all able to produce on a tuberculous organism the same reaction as tuberculin does. He has also very often found albumoses in the urine of febrile patients. If, now, we take into consideration that albumoses are formed whenever necrotic tissue is absorbed, the relation between fever and albumoses seems to be close indeed. Still, even this fact does not give us any hope of finding a uniform cause for fever. Krehl and Mathes state that a chemically pure albumose, but derived from a bacterial culture, has a great deal stronger pyrogenic action than an albumose derived from plain albumin. Be-

sides this, fever is unquestionably sometimes produced by a simple reflex action through the vasomotor, sensitive, or some other peripheral nerves, on the heat centers, or by primary lesions of these centers. At least, no other explanation can be given for the fever arising immediately after catheterization, in traumas, or some diseases of the brain, or for the experimental fever produced by Aaronson and Sachs and others, by simply injuring certain parts of the brain.

The conclusions derived, then, from the study of the pathology of the heat economy are as follows: Heat economy seems to resemble general metabolism inasmuch as it is a result of the joint work of many organs of the body; and fever, the most important pathological state of heat, is in most instances a special kind of intoxication by some substances not as yet well defined. Further work will have to show us the precise nature of these substances, and also decide the question whether there is some central apparatus conducting all the complicated works of the heat economy, and what the nature and office of such an apparatus are, if it does exist.

We have seen already that fever is usually accompanied by changes in the functions of nearly every organ in the body, among which the most important are the changes in general metabolism, and in the action of the circulatory and respiratory organs, and the morphological changes in the parenchymatous organs. We have shown that none of these changes can be the sole cause of the febrile elevation of temperature. On the other hand, we have no proof to show that the above-mentioned changes are a result of the febrile elevation of temperature.

The change in metabolism, for instance, consists in increase of the decomposition of the animal tissue, and most particularly of the albuminous parts of them; but the same increase in decomposition we find continues in febrile diseases even after we have reduced the temperature by antipyretics. Sometimes such an increase begins before the rise of the temperature has taken place; besides this same increase of tissue decomposition, we find in cancerous cachexias and anæmias, diseases that are not accompanied by fever. The same can be said about the increased elimination of N-containing substances and salts in the urine, and about the loss of weight in fever, as this all is simply a result of the increase in tissue decomposition.

A great deal closer are the connections between the febrile elevation of temperature and the accelerated respiration and action

of the heart, as both can be produced by the simple elevation of the temperature. It has been proven, even, that under the influence of heat the contractions of a frog's heart severed from its body become more frequent. Still, these changes continue, even when the temperature is artificially lowered. The most probable explanation, therefore, of all the above-mentioned changes accompanying fever is that they are not dependent in any way upon the elevation of the temperature, and the connection between them exists only inasmuch as they are most probably produced by the same agent. With the change in the nature of this agent the elevation of the temperature as well as the other so-called symptoms of fever must also change in their appearance. We have come, then, to additional proof of the fact that the causes of fever alone will give us the clue to differentiate and recognize different elevations of temperature.

Now, before we close, we must say only a few words as to the influence fever has upon the organism as a whole. At first the opinion was universally adopted that fever is a beneficial reaction of the organism against some disease. Liebermeister first expressed the opinion that a high temperature is injurious to the organism, and has to be combated. But lately, on Pfuege's initiative, experimental investigators are appearing to prove that a high temperature benefits the organism. The most important among these works is that by Loewy and Richter, who have endeavored to show that animals withstand better different bacterial infections (diphtheria, pneumonia, etc.), after having undergone the Sachs-Aaronson brain-prick than without it. This question is by no means settled as yet, but the truth must certainly lie somewhere between the two extremes. While high temperature in general is certainly injurious to the organism, an ordinary febrile temperature does no harm to it, and very probably often does some good. Liebermeister's opinion, therefore, that every rise of temperature must be fought against and reduced by all means, is wrong; especially since, as we have mentioned already, none of the above-mentioned changes accompanying fever is in any way influenced by antipyretics.—*The Medical Record.*

#### Apropos of Whistling.

To sensitive persons there is something even worse than the *fortissimo* small talk by which nine persons out of ten usually betray

their lack of manners and refinement. I have known women who claimed the privilege of voting as a right, yet who had so little consideration for the rights and feelings of other people, that they allowed their boys to make a perpetual nuisance of themselves by their shrill, loud whistling, without even a word of protest. But it is not only the boys who whistle; grown men are constantly whistling all about me, and nearly every day I have to go from one car on the elevated railway into another because some fellow is entertaining himself at the expense of all the other passengers. America has been called a country of whistlers, and nothing worse has ever been said of us by our bitterest enemies. Europeans do not whistle. Boys may, but well-dressed adults do not, and, as a rule, it is only cobbler's boys and street Arabs who indulge in this vice. During my recent trip in Europe, which covered parts of ten countries, I always said, to my wife when we heard any one whistling, "There's an American," and nearly always I found I was right.

There are doubtless a number of persons who cannot understand why whistling should be considered offensive and vulgar. It is offensive and vulgar for the same reason that the use of musk and other villanous "perfumes" is considered offensive and vulgar. When I was a boy, in the days when Dickens painted American manners in such unpleasant colors, no objection was made to the use of these vile and obtrusive smells. But we have progressed in refinement, and today it is considered very bad manners to use "loud" perfumes in public. The time will come when loud whistling—from which it is as impossible to escape as from the odor of musk—will also be frowned on. It is in the hope of accelerating the advent of that time that I am writing this jeremiad.

What aggravates the offence is that, in the vast majority of cases, the whistlers do not even give us a tune, but just maunder along in a chaotic, idiotic succession of tones. I suppose this sort of inane noise gives one a good idea of what goes on in the brains of persons who never think. To musically refined persons, it is a torture that might have been used during the Inquisition. Paderewski, though passionately fond of billiards, used to leave the hall in the Windsor Hotel in the middle of a game if any one began to whistle. He once remarked that a man ought to be allowed to shoot at sight any one who whistled in public. He was not joking, either. At least, I hope he wasn't.—*Henry Finck, in The Musical World.*



**Rectal Feeding After Abdominal Operations.**

Much of the success of abdominal surgery at the present day is attributable to the great care bestowed in the preparation of the patient for operation and the after-treatment. As in many instances the nutrition is more or less seriously impaired, the question of alimentation assumes great importance in the after-management of the case. After operations upon the stomach and intestinal tract it may be, and often is, hazardous to feed the patient by mouth for some time and rectal feeding becomes indispensable. In selecting foods for nutritive enemas the point to be borne in mind is that the mucous membrane of the lower portion of the intestinal canal has but little digestive power, and hence the nourishment must be presented in such form that it can be easily absorbed. Another point is that the mucous membrane of the lower bowel soon becomes irritable unless the nutritive material is perfectly bland, and also in such condensed state as to leave behind no residue to decompose and act as an irritant. Physiological experiments have shown that when albuminous material is transformed into albumoses it is absorbed almost immediately without requiring any preliminary digestion, and after being taken up into the circulation is rapidly reconverted into serum albumin. For this reason the albumoses are well adapted for rectal feeding, and according to the observations of Dr. J. B. Herrick, of Chicago, *Chicago Medical Recorder*, and of Dr. L. H. Watson, of Chicago, *Medical Review of Reviews*, somatose, which is a pure preparation of albumoses, is an excellent nutrient for this purpose. It may be administered alone in solution or in connection with other foods, such as milk and white of egg. In the official report of the case of the late President McKinley, *American Journal of the Medical Sciences*, it is stated that somatose was utilized in a saline solution in amounts of one drachm at a time. In the article on rectal alimentation referred to, Dr. Watson recommends that the bowels should be emptied by a preliminary laxative or cleansing injection before administering the nutritive enema. The enema should be given at regular intervals through a soft rubber tube, and should be inserted rather high into the rectum. The amount should not exceed four or five ounces. As soon as the gastric disturbances subside, the patient may be given small quantities of food by mouth, gradually diminishing the number of rectal enemas.

**The Treatment of Nasal Catarrh by the General Practitioner.**

By EUGENE C. UNDERWOOD, M. D.  
Surgeon B. & O. S. W. R. R.; Surgeon K. & I. B. Co., etc.,  
Louisville, Ky.  
(Abstract from *St. Louis Medical and Surgical Journal*  
July, 1901.)

I have long entertained the view that the general medical practitioner neglects to treat his patients for catarrh and sends them to a specialist when he could successfully manage these himself. In fact, the treatment of catarrh is very simple and the results which follow correct and systematic treatment are very satisfactory. In practice, two forms of chronic nasal catarrh are met. These are hypertrophic rhinitis and atrophic rhinitis.

The hypertrophic form is more generally seen, and is characterized by a thick mucous discharge from the nose, great liability to colds, obstruction of one or both nostrils, which forces the patient to breathe through his mouth, nasal intonation of the voice. There is more or less headache and the sense of smell is lost or impaired. There is dryness of the throat, deafness and other symptoms showing the extension of the disease to neighboring organs. Exostosis of the osseous structures often is seen.

Atrophic rhinitis (ozena) is characterized by a sense of dryness in the nose and throat, a thick, purulent discharge and the expulsion of discolored crusts and an offensive putrid odor. The sense of smell is impaired and the patient is weak and anemic.

The mucous membrane is dry and glazed, but in advanced cases ulceration and necrosis are present.

The treatment consists of applications directly to the diseased area and the administration of such internal remedies as will correct any coexisting disease or morbid state. In some cases where there is occlusion by exostosis the resources of surgery must be invoked.

Let me examine more in detail the treatment of the types of nasal catarrh.

In simple chronic hypertrophic rhinitis the results of treatment will be most flattering. In a case attended with no constitutional disease nothing is necessary beyond having the patient spray the nasal mucous surface with a solution composed of equal parts of water and hydrozone every three hours.

If the case has persisted some time and the patient has an amount of mucous discharge, I have him take twenty drops of balsam of copaiba four times daily. The hydrozone is not only a disinfectant and

germicide, but its curative action on the inflamed mucous membranes is speedy and is not equaled by any other drug I have ever used. When the patient is anemic I have him take iron, and any other drug is used when it is called for by any associated disease or morbid conditions, but the hydrozone spray is used in all cases.

In the atrophic variety we shall have to use the same local application. The hydrozone at once overcomes the offensive odor and takes off the purulent crusts.

These cases must be treated with cod liver oil, iron and such other remedies as will bring up the general health.

Here are a few clinical histories :

Mr. R. H. M., age 60, had been a sufferer for two years. There was no exostosis, but when he had a cold he could breathe only through his mouth. He was in good general health, so I had him buy an atomizer and use a spray composed of equal parts of distilled water and hydrozone. He sprayed the mucous surface of the nose every three hours. On this he made rapid improvement and in three weeks had no further symptoms.

S. M. T., age 18, had chronic hypertrophic nasal catarrh in which the mucous discharge was very abundant, and this was associated with dryness of the throat and constant desire to hawk and spit. She used the hydrozone and water spray, and took fifteen drops of balsam copaiba three times daily. I had the pleasure of seeing this young woman go along to complete recovery in a period of six weeks.

Mrs. R. J. C., age 49. This lady had atrophic rhinitis and as soon as she came near you the putrid odor asserted itself. Her general health was lowered. I had her use the hydrozone and water spray and take cod liver oil internally. She spent last winter in Cuba, and has just gotten home greatly improved in general health and her catarrhal disease is better.

She says the spray effectually destroys the disgusting odor and that scarcely any discharge now appears.

I expect to see this patient entirely well in several months.

#### \*Excerpts from the Remarks Made.

By DR. ALBERT C. BARNES, of Philadelphia.

The paper of Dr. Reyburn just read merely reiterates the well-known fact that petroleum, when administered internally, is not absorbed from the gastro-intestinal tract,

\*At the Second Annual Meeting of the American Therapeutic Society, held at Washington, D. C., May 8, 1901.

but, as is equally well-known, a remedy may have the most pronounced physiologic effects purely on account of its mechanical properties. Dr. Robinson of Philadelphia states in the *Medical News* of July 14, 1900: "In over fifty selected cases where nutrition, digestion and body weight were impaired and the purest oil administered in one or two dram doses, four times a day for periods of from three to six months, there was in every instance increase in weight and improvement in health, strength and feeling of well-being. The gain in weight was five and a quarter to twenty-three and a half pounds. There was no other change in living conditions or medication which might have caused these improvements." These clinical effects have been noted and recorded by a number of other observers. The manner in which petroleum accomplishes these results is shown by the laboratory experiments described in detail by the speaker. It was found that the addition of petroleum to albumen digested by an artificial gastric juice under exactly the same conditions as prevail in the human system, very materially hastened and facilitated the process of digestion; it was more rapid and complete than in the same experiment conducted without petroleum. Furthermore, it was shown experimentally that the mechanical influence of petroleum upon the churning, peristaltic movements of the upper portions of the small intestines favorably influenced the processes of absorption. In view of these experiments, it can be safely concluded that the manner in which petroleum beneficially effects nutrition is by facilitating, expediting and completing the processes of digestion and assimilation of food. Another experiment described by the speaker was that conducted upon a man with marked malnutrition, in which the changes in metabolism were accurately studied for a period of three weeks by feeding the patient upon a normal diet and then determining the daily elimination of nitrogen in the urine and feces. It was found that under the influence of petroleum the retention of nitrogenous matter in the system was increased. As is well-known, the only method of determining the influence of any agent upon nutrition is by determining the daily body elimination of nitrogen in the urine and feces; if a patient's retention of nitrogen is increased, the most important element of the tissues is conserved, and nutrition is correspondingly improved. Furthermore, the facts that petroleum passes through the intestines in its original form, and that it is a solvent of many remedies administered

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SAMPLES AND LITERATURE TO PHYSICIANS UPON REQUEST.

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for their antiseptic and astringent influence upon the intestines, indicate a useful field for petroleum as a vehicle. Robinson states (*ibid.*): "I have extensively given from five to ten grains of salol in two drams of this oil, four times a day, and reclaimed the oil from the feces and found it to contain some salol and its components, phenol and salicylic acid. This proves the carrying of a chemical antiseptic and antiferment through the entire canal." This work has been corroborated by numerous other observers. The speaker stated in conclusion that the bulk of experimental and clinical evidence tends to show that petroleum is entitled to a wider field of application in medicine.

#### Parke, Davis & Co's Vaccine not found Wanting.

We are assured most positively that in not one of the recent fatalities from tetanus following vaccination had the vaccine of Parke, Davis & Co. been used. Such fatal cases of tetanus following vaccination have been reported at Camden, Atlantic City, Bristol, Brooklyn, Cleveland and St. John, N. B. Those who know of the careful, scientific way in which this firm prepare their vaccine and antitoxin will not be surprised at the result of this investigation, for their laboratories are in charge of skilled, trained bacteriologists and every safeguard is employed to prevent contamination of any kind, and to insure a product of known strength and reliable efficiency.

#### INCREASE OF BLINDNESS IN ARMY HORSES.

—The Army and Navy Register records that an alarming percentage of Army horses in Cuba have gone stone blind. Of the 2,808 animals inspected in the course of a year, 694, or almost 25% were condemned for blindness. Of the 694 horses thus afflicted, 484 were in Cuba. The affliction does not yield to treatment, and the veterinarians are at a loss to explain it or account for it, though they have concluded that it is not caused by the glare and heat of the tropic sun, as was at first supposed. In the Philippines where the climate is much the same as in Cuba and Porto Rico, no such disease appears to exist, so far as indicated by the figures. In these latter islands a great majority of the public animals condemned during the year had glanders; but it is reported that the disease is now being gotten under control, so that its spread may be largely prevented. —*American Medicine.*



#### A Worthy Honor.

At the December meeting of the Maine Academy of Medicine and Science, E. M. Fuller, M. D., of Bath, was elected President. The other officers are Daniel Driscoll, M. D., Secretary, and H. F. Twitchell, M. D., Treasurer.

The Trustees of the New York Orthopaedic Dispensary and Hospital announce that the Surgeon-in-Chief, Dr. Russell A. Hibbs, will give a course of clinical lectures on Orthopaedic Surgery at the Institution, on Monday and Thursday afternoons, at five o'clock, from December 2nd to January 2nd (both inclusive). The course will be free to the medical profession and students.

HENRY L. SLOTE,  
*Chairman, Committee on Clinical Instruction.*

W. B. Saunders & Co., publishers, Philadelphia, announce the publication of Nothnagel's Encyclopedia of practical medicine, edited by Dr. Alfred Stengel, professor of clinical medicine in the University of Pennsylvania. The set will consist of ten or twelve volumes, translated by competent men who know English and German thoroughly, and who are acquainted with the subjects which they translate. Five or six volumes will appear during 1902 and the remainder soon afterward.

The usual method of publishers, when issuing a work of this kind, has been to compel physicians to take the entire system. This seems to us in many cases to be undesirable. Therefore, in purchasing this encyclopedia, physicians will be given the opportunity of subscribing for the entire system at one time; but any single volume or any number of volumes may be obtained by those who do not desire the complete series. This latter method, while not so profitable to the publisher, offers to the purchaser many advantages which will be appreciated by those who do not care to subscribe for the entire work at one time.

This American edition of Nothnagel's Encyclopedia will, without question, form one of the greatest systems of medicine ever produced, and the publishers feel confident that it will meet with general favor in the medical profession.

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### The Antikamnia Chemical Company's New Laboratory.

Frank A. Ruf, president and treasurer of The Antikamnia Chemical Company has just purchased a lot 80x109 feet, on the northwest corner of 22nd and Pine Streets, for \$20,000.00 cash, on which his Company will begin the erection, early in spring, of a new "Antikamnia Laboratory," five stories high, covering the entire lot. The improvements will cost about \$45,000.00 irrespective of the laboratory apparatus and appliances which will be of most approved pattern, from Darmstadt, Germany. The offices and various departments will be fitted with all modern conveniences, making the whole plant one of the most complete Specialty Laboratories in the United States.

The Antikamnia Chemical Company is one of America's if not of the world's best known pharmaceutical concerns and justly so. Energy, enterprise and push, backed up by the judicious and liberal use of printers' ink, in keeping their line of preparations in touch with the medical profession, from one end of the universe to the other, have made it so.—*The St. Louis Republic.*

### The "Human Monkey" of Java.

Professor Hæckel's latest publication contains some curious information about the "human monkey" of Java. An interesting specimen of the young gibbon was watched by Professor Hæckel at his own house in Java. The species is found only in this island and is properly called *Hylobates leuciscus*. The natives call it "oa" on account of the characteristic sound it utters. When standing it is scarcely taller than a child of six. The head is comparatively small, and the waist is slender. The legs are short and the arms much longer. The face is more human than that of the orang-outang. Professor Hæckel says: "Its physiognomy reminded me of the manager of an insolvent bank pondering with wrinkled brow over the results of a crash. Distrust of the 'oa' toward all white Europeans is very noticeable. On the other hand, he was on terms of intimate friendship with the Malays in our household, especially with the small children. He never crawled on all fours when tired of running, but stretched on the grass beneath the tropical sun, with one arm under his head. When I held tasty food just out of his reach he cried like a naughty child, 'huite, huite' a sound altogether different from 'oa, oa,' with which he ex-

pressed various emotions. He had a third and more shrill sound when he was suddenly frightened. The speech of these human monkeys has not many different sounds, but they are modulated and altered in tone and strength with a number of repetitions. The animals also use many gestures, motions with their hands, and grimaces, which are so expressive in manner that a careful observer can detect their different wishes and various emotions. My specimen liked sweet wine. He grasped a cup in both hands and drank like a child. He peeled bananas and oranges just as we were accustomed to do, holding the fruit in his left hand. Most of the Malays do not regard the gibbon and orang-outang as brutes. They believe the former are bewitched men and the latter criminals who have been changed to monkeys as a punishment. Others think they are men in the course of metempsychosis."—*The Sun.*

### The New X-Ray Kinraide Coil.

A new electrical apparatus, specially designed for physicians' convenience, is the Kinraide Coil. It can be connected directly to any lamp socket, without the use of a rheostat. The amount of current consumed is small, while the coils are wound for either direct, or alternating circuit of all voltages.

When used with the tubes designed for them, most wonderful X-Ray effects may be obtained. For instance, a hip picture may be made in 2½ minutes; for a hand or foot it is a matter of seconds only.

The manufacturers, Swett & Lewis, 79 Franklin St., Boston, have paid special attention to the construction of the machine. It cannot be broken down by use or abuse. The current is under absolute control, and there is no danger of giving too large a dose. A full description of the machine is given in their catalogue, which they will send upon application.

HEALTH ITEM:—"Whenever I go into a house," says a throat specialist, "and see a silk muffler hanging in the hall, I know that I have a possible patient there. Nothing ever did so much to weaken the throat as these mufflers. It is only necessary for a man who wears one of these things to go without it on one cold day. After that he is ready for me or one of my kind."

Nowadays everybody is "ill" and nobody is sick, but the man reported in the evening newspaper as ill with a lame arm must surely be in a bad way or else the paper is.



## **BONE MARROW**

Augments the oxygen carrying power of the blood by increasing the percentage of Hemoglobin.

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## **BONE MARROW**

Stimulates cell proliferation and supplies the new-born cells with the elements necessary for their growth.

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## **BONE MARROW**

Makes flesh and blood and establishes a proper ratio between the red and white corpuscles.

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## **EXTRACT OF RED BONE MARROW**

Contains marrow cells, nucleins, hemoglobin and other blood-making substances, and if given in two teaspoonful doses, well diluted with cold still or carbonated water, milk or beer, its influence will be noted promptly in anemia, chlorosis, marasmus, rachitis, malaria, tuberculosis, and in patients suffering from loss of blood.

**Armour & Company**  
CHICAGO

## Worthy and Seasonable.

—Jes' So—

When the temperature of the body is above normal, conditions are especially favorable for germ development. It is a matter of every day observation that a simple laxative is often sufficient to relieve the most threatening situation and prevent the most serious complications. To reduce fever, quiet pain, and at the same time administer a gentle laxative and strong tonic is to accomplish a great deal with a single tablet. We refer to Laxative Antikamnia & Quinine Tablets. Among the many diseases and affections which call for just such a combination, we might mention la grippe, influenza, coryza, colds, chills and fever, dengue and malaria, with their general discomfort and great debility. We would also especially call attention to the wide use of Antikamnia & Codeine Tablets in chronic or semi-chronic pulmonary diseases. The following concise statement from Dr. W. B. Morford, No. 1521 Tasker Street, Philadelphia, is worthy of note. He says:—"I find antikamnia in combination with codeine, to be almost a specific in the coughs of phthisis. In a recent case of "old-fashioned" or catarrhal consumption I obtained most satisfactory relief for the patient, from a most distressing cough, with Antikamnia & Codein Tablets."

**AVERAGE LENGTH OF LIFE.**—We are rapidly gaining in the average length of human life. Better sanitation, the enforcement of precautions against contagious and infectious diseases, and the advancement of surgery and medicine, are causing an even more rapid reduction of the death rate than the layman might guess. The census bulletin of deaths that occurred in 271 cities of 5000 population or more shows that 18.6 persons died in 1900 out of every 1000, whereas in 1890 the number who died in the same cities was 21 out of every 1000. The average age at death in 1890 was 31.1 years: In 1900 it was 35.2 years. If these statistics be accurate, the saving of human life that has been achieved in a decade is enormous.

**SMALL-POX IN ALASKA.**—The captain of the revenue cutter Bear, who has just returned from Bering Sea, brings reports of the havoc wrought last year by an epidemic of small-pox. Not more than half of the population survived. In the asylum at Golovin and Port Clarence there are 45 orphans, whose parents were victims of last season's epidemic.

Our old friend Dr. Risus Sardonius says, "its amazin' how some people will persist in bein' well and in cuttin' down the income of the doctors so that many of them are obliged to live on the int'rest of what's owed 'em."

"Why," he continues, "here's a lot er doctors who 've spent three or four thousand dollars in fittin' 'emselves for their work, and then they hang round for several years waitin' for their friends and acquaintances to fall sick so's they can bring their skill to their relief, and most er these people will persist in being lusty and vigorous."

Why, some people are so condemn healthy that I don't see how they have the cheek to look a doctor in the face.

D. S. Maddox, M. D., United States Examining Surgeon, Coroner Marion Co., Ohio, says:—*Med. Brief* \* \* \* \* For the control of pain opium is and always has been the sheet anchor. But opium, pure and simple has many disadvantages which render its use in some cases positively harmful. Opium is one of the most complex substances in organic chemistry, containing, according to Brunton, eighteen alkaloids, and an organic acid. The ordinary alkaloids, of which morphin is the chief, have the same objections as the crude drug. They constipate the bowels, derange the stomach, and worst of all, induce a habit which utterly destroys the moral and physical nature of the individual. While looking about me for some agent which would produce satisfactory anodyne and hypnotic results without the deleterious and pernicious after-effects of opium and its ordinary derivatives, I came upon the preparation known as papine. After a somewhat extended trial of this remedy I am convinced that it is the ideal anodyne. Although derived from the Papaver Somniferum it is singularly free from the objections of the ordinary opiates. It does not constipate; it does not derange the stomach; it does cause headaches; it does not induce any drug habit; it is safe and may be given to children as well as adults.

There is no better vehicle for administering iodides, bromides, salicylates, morphin and other drugs that disturb the digestive functions, than Armour's Essence of Pepsin. This preparation may also be used to great advantage in making junket, as it possesses great curdling as well as proteolytic power.

Your Attention,---  
just for a moment.

**Prescribe  
Hydroleine,  
Doctor,  
and**

**prove the  
truth of our  
statement.**

Yes, Doctor, and this is precisely what Hydroleine is,—a fatty food,—a pancreatized (pre-digested) preparation of cod-liver oil. No other food has ever demonstrated its power to nourish the whole bodily system like Hydroleine. The test of prolonged clinical experience supports us in our assertions.

"The curative treatment of consumption consists in helping the patient to eat and digest large quantities of wholesome food—especially fat."

PROF. FRANCIS DELAFIELD, M.D.

Sold by druggists generally.


**THE CHARLES N. CRITTENTON CO.,**  
115-117 Fulton Street, New York.  
Sole Agents for the United States.

Samples sent to physicians free on application.

THE ALKALINITY OF BLOOD SERUM

# GLYCO-THYMOLINE

(KRESS)



Birmingham Nasal Douche.

## A PURGATIVE For Mucous Membrane

INDICATED IN ALL CATARRHAL CONDITIONS, ESPECIALLY

## NASAL CATARRH

"Glyco-Thymoline (Kress) is well adapted for the treatment of catarrhal conditions of the mucous membranes. I have frequently employed it with benefit in nasal, buccal and bronchial affections. Direct local medication is of much advantage in these cases. In some instances we may safely depend on topical measures alone; in those where internal treatment is also necessary, Glyco-Thymoline (Kress) proves an excellent adjuvant."

MEDICAL BULLETIN, Phila., Pa., March, 1899.

**SPECIAL OFFER**

A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges. K & O Douche to physicians, 15 cts.; \$1.50 per doz. Retail 25 cts. Remit stamps.

**KRESS & OWEN COMPANY, Chemists, 221 Fulton Street, New York**

**HASTENS RESOLUTION AND FOSTERS CELL GROWTH**

### Yellow Fever in Havana.

The report which Maj. Gorgas, the chief sanitary officer of Havana, has sent to the adjutant-general of Cuba, respecting the vital statistics of the city and its dependencies for the month of October, is one of the most significant medical statements that has ever been made. Maj. Gorgas has had sanitary control over a community having an estimated population of 260,000. For more than a century yellow fever has been endemic in Havana, and during that time there is no record of two successive days in October having passed without a death occurring from yellow fever. In 1896 the number of deaths from yellow fever in October, was 240; in the month of October, 1899, the number of deaths was twenty-five, and in October, of 1900 there were 308 cases and seventy-four deaths. But during the month of October, 1901, there was not a single death nor a single case, an experience which, we believe, is unexampled in medical history. The conditions for having yellow fever were just as favorable this year as they were last year, and the non-immune population was probably greater than ever before. The only change between last year and this is that since February the sanitary authorities have carefully killed all mosquitoes in the neighborhood of every case that has occurred and the infected house and all the adjacent houses in every case have been carefully disinfected. This form of treatment has led to a steady diminution in the yellow fever cases, beginning with the month of April of this year. Maj. Gorgas says that the work at Havana has been carried out on the hypothesis that the mosquito is the only means of transmitting the disease; that they have not considered fomites in any way; clothing has not been disinfected, nor any effort made except to kill the mosquitoes which had bitten a sick person and to prevent any mosquitoes from biting after the case was discovered. He is of the opinion that, if in Havana, where yellow fever has been endemic for 150 years, and where at present there is a non-immune population of approximately 40,000 people, it is possible to get rid of yellow fever, have free communication with half a dozen infected towns in its neighborhood and still prevent the introduction of the disease, there should be no difficulty in southern American cities in doing the same thing with relatively little trouble and expense.—*Boston Herald*.

All honor to Gen. Joe. Wheeler, who steadfastly refuses to increase the comparatively small stipend he receives as a retired

major-general by lending his name to any of the numerous stock-jobbing schemes that undertake to bait people by the use of prominent names. He sets a good example to a large number of eminent gentlemen who are not so prudent and who possess less delicacy on the subject.

NEW TENEMENT HOUSE LAW OF NEW YORK CITY which takes effect April 12, 1902, and requires that all rooms in a tenement must open on a street, yard or airshaft, the latter to be at least 25 feet in area, or must have a glass window between it and another room which opens into a street, yard or airshaft, and further provides for 600 cubic feet of air space and 60 feet of floor area in each room is very much objected to by real estate associations who are heading a movement for the repeal of its most important sections.

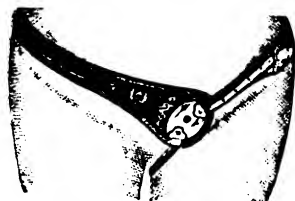
PESSIMISM IN CANCER.—G. Wiley Broome protests against the pessimistic attitude of certain physicians in regard to ascertaining the cause of cancer. He believes that in time it will be proved to be of parasitic origin. The distinctive character of malignant tumors in the rapidity of their development, the extension of metastasis, which so strongly resemble those of diseases known to be due to bacteria, the cachexia out of proportion to the extent of the local disease, and suggesting the formation of a toxic substance, the fact that a spontaneous cure never takes place, the disease moving onward relentlessly to the fatal issue, and finally the liability of recurrence even after operation, are so many clinical evidences pointing to a parasitic origin. Laboratory researches are not yet conclusive, but point to this origin. Plimmer examined microscopically 1,298 cases of carcinoma, in 1,130 of which he found parasitic organisms, while ninety of the entire number were unfit for examination. He states positively that those bodies are constantly present in cancer and constantly absent in other diseases or degenerative conditions. The author believes the outlook to be very hopeful as regards the discovery of the cause and the cure of cancer.—*St. Louis Medical Review*.

### Nasal Catarrh.

This condition so prevalent at this season yields promptly to treatment by thoroughly cleansing the nasal passages with a solution composed of two ounces of water and one Micajah Medicated Wafer followed by an ointment, applied to the inflamed mucous membrane, of two ounces of Adeps Lanæ and one-half Micajah Wafer well rubbed together.

# Flavell's Elastic Trusses,

Can be Worn Day and Night.

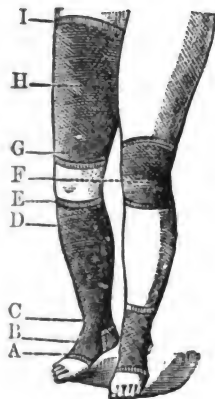


PNEUMATIC PADS.

Give circumference of abdomen on line of Rupture.  
State if for Right or Left.

## ELASTIC STOCKINGS.

Give exact Circumference and Length in all cases.



	NET PRICE TO PHYSICIANS.	SILK each	THREAD each
A to E	\$2.50	\$1.50	
A to G	4.00	2.50	
A to I	5.50	4.00	
C to E	1.50	1.00	
E to G	1.50	1.00	
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Goods sent by Mail upon  
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Safe delivery guaranteed.

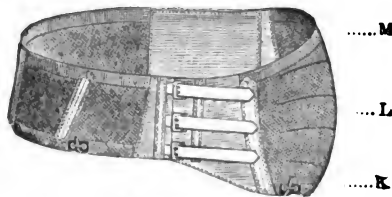
Send your Orders Direct to

**G. W. FLAVELL & BRO.,**

1005 Spring Garden St., Philadelphia, Pa.

## ABDOMINAL SUPPORTER.

Give exact circumference of abdomen  
at K, L, M.



Silk Elastic \$3.25  
Thread Elastic 2.50

## Flavell's Uterine Supporter.



Give measure 2 inches below  
Navel.  
State if for Prolapsus, Retro-  
version, or Anteversion.

NET PRICE FOR PHYSICIANS.  
**\$2.50.**

# PERPLEXITIES

*in the Treatment of Diseases of Women*

are readily overcome by the use of

## MICAJAH'S Medicated Uterine WAFERS

Their ANTISEPTIC, ASTRINGENT and  
ALTERATIVE action renders them of  
especial service in congestions and  
inflammations of the mucous mem-  
branes of the Genito-Urinary tract.

**Sig:** Insert Wafer into the vaginal canal, up to the Uterus, every  
third night, preceded by copious injections of HOT water.  
LIBERAL SAMPLES AND BOOKLET "HINTS ON THE TREATMENT  
OF DISEASES OF WOMEN" SENT GRATIS BY MAIL.

**MICAJAH & CO. WARREN, PA.**

ESPECIALLY INDICATED  
IN

Gonorrhea  
Vaginitis  
Vulvitis  
Leucorrhoea  
Endometritis  
Granular-Os  
Urethritis  
Cytitis  
Uterine  
Displacement  
&c. &c.

### Hueppe and Koch.

The two schools of thought on questions bacteriological are well represented at present by the distinguished investigators Hueppe and Koch. Both men are deeply versed in bacteriology and physiological chemistry. Hueppe emphasizes the importance of the perfect health of the body cell—and the special treatment of the body cell as a means of frustrating the attacks of germ life. Koch emphasizes the importance of destroying entirely all germ life so that there will be no attack.

Of course both men are right. We must destroy all the germ life we can. But since a war of extermination of disease germs is impracticable at present the physician finds a more profitable field for his exertions in preparing the body cells to resist and throw off the attack of germ disease. It is no doubt by this sort of special preparation of the lung cells that hypophosphites and cod liver oil do so much to prevent the progress of the tubercular organism. Scott's Emulsion containing both the cod liver oil and the hypophosphites is a good example of those therapeutic agents which bring immunity by reinforcing cell life.

**THE ELEVATOR DISEASE.**—It looks as though people with weak hearts had, after all, better climb ten flights of stairs than effect the ascent by means of the lift. This convenient institution is becoming ubiquitous. We soar up to the topmost story of the skyscraping flat, we descend through geological strata to the twopenny tube by its assistance. We thought we were thereby saving our vital energies and lengthening our lives. The doctors seem to hold another opinion. Lift attendants have died sudden deaths; people with weak hearts have noticed ominous sensations when in the elevator. We are told the sudden transition from the heavier air at the foot to the lighter air at the top is extremely trying to the constitution. Even millionaires and bishops and aldermen are now voluntarily tramping up stairs and avoiding the swifter but insidious route. In fact, a new disease has swung into our ken, 'lift-men's heart.' We have all of us been risking this malady without knowing it. It is true most people have experienced the singular sensation of internal collapse when the lift floor sinks beneath the feet, but none of us suspected the results might be so serious. Every new notion for health and comfort seems to bring its particular Nemesis.—*The London News*.

**HALL CAINE'S ABSURDITIES.**—One would think when a novelist had once been convicted of gross ignorance on medical matter concerning which he wrote with glibness, he would not make a second incursion in that dangerous field unless he was fairly sure of his ground. Not so Mr. Hall Caine (though perhaps we err in dignifying him with the title of novelist). In his latest effort, "The Eternal City," he describes how a medical man examined the breast of a patient and the glands under her arms, and, finding cancer, announced that a nurse must be summoned immediately. This practitioner, who is supposed to be the most fashionable doctor in Rome, tells the friends a few pages further along in the dreary tale that if the cancer had been diagnosed earlier "nephrectomy" might have been possible, but that the case as he found it was beyond the reach of surgery.—*The Medical Record*.

**TOO GREAT A TAX ON THE BRAIN.**—"Heard such a jolly conundrum, old chappie—goes like this: Why does a hen go across the street when he wants to get from one side to the othah, ye know?"

"Gracious, old chappie, I cawn't tell, bah Jove. Why does he?"

"Why—er—blest if I know meself, old boy, I couldn't wemember it *all*, ye know."

**TREATMENT OF ACUTE MUCOUS AND DYSENTERIC COLITIS IN CHILDREN BY SULPHATE OF SODIUM.**—According to E. C. Aviragnet, the results obtained by the use of sulphate of sodium in these affections are remarkable. Its action on the secretions of the large intestine is wonderful and constant. In a large dose it acts like all purgatives; in a small dose it causes the glairy and bloody hypersecretion to disappear. The dose advised is fifteen grams the first day, and small doses on the following days—five grams, for example, in a child of twelve to fourteen years; two grams in a child of two years. The administration should be continued more or less for eight days. The salt is given in a glass of sweetened water. All of the unfavorable symptoms are rapidly ameliorated.—*Gazette Hebdomadaire*.

**FAITH CURISTS INDICTED.**—Indictments for manslaughter have been brought against Sylvia Bishop and his wife, of Hamilton, O., for neglecting to obtain medical attendance for their child, who was burned by a gasoline explosion last July and died from the effects.

Among the notable arrivals in Chicago last week were 231,904 dogs.



# The Oncome of Age.

There are many conditions of  
advancing life in which

## Fellows' Syrup of Hypophosphites

is beneficial, viz :—

### DISEASES OF THE

Assimilative Organs.

Circulatory Organs.

Respiratory Organs.

Nervous System.

The value of a stimulant in the enfeebled digestion of the aged has been recognized from the earliest time.

For those who decline to accept the aid of wine, and who need something of a stimulant character to rouse the flagging powers of digestion, Fellows' Syrup of Hypophosphites offers special advantages. In all conditions commonly met with in persons of Advancing Life, a tonic like Fellows' Syrup is clearly indicated.

Dr. Milner Fothergill wrote : "It (Fellows' Hypophosphites) is a good all-around tonic, specially indicated where there is Nervous Exhaustion.

SPECIAL NOTICE :—Fellows' Syrup is advertised only to the Medical Profession ; is never sold in bulk, and physicians are cautioned against worthless substitutes.

Medical letters may be addressed to

**Mr. Fellows, 26 Christopher Street, New York.**

**≡ A PHYSICIAN'S CARRIER PIGEON SERVICE.**—A correspondent of the *New York Times* says that Dr. E. W. Gould, of Rockland, probably has the most novel messenger service in Maine. The doctor makes a specialty of homing pigeons. The other day he was called to Matinicus Island to attend a patient whose condition was very serious. To reach there he had to make a dangerous trip over twenty miles of rock-strewn, storm-tossed waters. Before he left the island he gave into the keeping of the family of the patient six homing pigeons, to be used as messengers to inform him of the patient's condition. The messages came faithfully and regularly and brought assurance to the physician of his patient's steady progress toward recovery.

The latest batch of newly organized companies that have gone down to Maine to get incorporated show an aggregate capitalization of something over a million dollars, with about a thousand dollars cash paid in. This sort of business is rated a good thing for Maine's treasury, but it is bad for her financial reputation.—*The Boston Herald*.

**INVESTIGATION AND TESTING TUBERCULOSIS CURES.**—The public has long believed the profession is selfishly suspicious of tuberculosis cures. In England one hospital for fifty years has made provision for testing all non-secret cures that offered any reasonable prospect of usefulness. The failure of those found wanting when tested is quite as noteworthy as the non-appearance of the most famous ones for investigation. No secret remedy has ever been submitted. Our daily papers are loaded with the statistics and marvels of these "cures," but their owners do not wish them submitted to really scientific testings.—*American Medicine*.

**CANCER INVESTIGATION.**—The city of Frankfurt, Germany, has been presented with a fund of 500,000 marks for an endowment for research in regard to the etiology of carcinoma. The work has been entrusted to Ehrlich and Wiedenreich.

**THE MEDICAL STANDARD** at McGill University will be advanced in the near future, and there is a probability of increasing the term from 1 of 4 sessions of 9 months each to 1 of 5 sessions of 9 months each.

Apropos of Mrs. Nation's divorce, a philosopher rises to inquire if it is not remarkable that women with a mission to reform and uplift mankind in general are so frequently found unable to make one little home happy. The horrid wretch!

### The Theatre Program.

American theatregoers are not subjected to the imposition which obliges Europeans to pay for the program of a play; but the pamphlet which is given to them gratuitously has practically nothing to recommend it except those pages which set forth the characters and the acts. It seems strange that theatrical managers should persist in inflicting upon the patrons of their houses such a literary atrocity as the conventional program. In its present form it is not only an annoyance to the playgoer, but we fail utterly to see its use as an advertising medium. The alleged jokes, which are inserted probably with the idea of relieving a little the monotony of the whole, are absolutely, without exception, the most ghastly and preposterous of their kind.

**GOOD REASON.**—Professor—Why does the earth move?

Hardup (absently)—Can't pay the rent, I suppose.—*Exchange*.

**THE DOCTOR'S BILL.**—The physician himself is at fault for the remissness of his patrons in paying their dues. Indeed, our profession has been brought under contempt through the adage—"As hard to collect as a doctor's bill." Tradesmen are promptly paid the entire amount of their bills. The doctor would be, too, if he would only put up a little fight for it; but, without a particle of business insistence, with childlike timidity, he humbly submits, without protest, to being paid at any odd time, in a haphazard way, at long intervals, and then, usually, only a part of his bill, instead of the whole of it. Eventually, payments become more and more remote, while the amounts at each payment dwindle in proportion.—*Dr. G. R. Patton*, in *The Northwestern Lancet*.

And yet another big tobacco deal on the tapis, with the capital stock marked up to \$50,000,000 this time. What a lot of money our little vices do represent.

**ANGLOMANIAC PHILOSOPHY.**—"Now, thee here, old chappie, when you think you know, you know, then you know you think you know, you know; then, which is better, to know you think but don't know, you know, or to think you know, but don't think, don't ye know?"

"Y-yeth indeed, Weggy,—Bah Jove!"

**SPICY.**—"If you intend to dine on us," queried the captured mariner, "why did you greet us with a fusillade?"

"Because we always pepper our food before eating it," grinned the cannibal.—*Philadelphia Record*.

# Journal of Medicine and Science.

ISSUED ON THE TENTH OF EACH MONTH.

In the Interests of Public Health, and in order that the People of Maine may reap the great Benefits, both hygienic and economic, assured by a judicious Application of the Principles of Preventive Medicine, this Journal supports the following Propositions and urges Physicians and Laymen to work diligently to further their Consummation.

- 1st. The Establishment of a Sanatorium for the Treatment of the Consumptive Poor.
- 2nd. The Abolishment of the Coroner System and the Appointment of Medical Examiners.
- 3rd. The daily Inspection of School Children by School Physicians.
- 4th. The more liberal Endowment of our Medical Schools by private Charity, and the voting of larger Appropriations to our State and Local Boards of Health.
- 5th. The Establishment of a State Bacteriologic Laboratory.

For, surely, health is the prime essential to success in life, and the health of the people is the foundation upon which all their happiness and all their power depends.

Vol. VIII.

PORTLAND, MAINE, JANUARY, 1902.

No. 2.

## Original Articles.

### The Present Status of our Knowledge of Infant Feeding.

By T. M. ROTCH, M. D., of Boston.

**T**HE following is a brief abstract of the excellent paper read at the December meeting of the Maine Academy of Medicine and Science, by Dr.

Rotch.

No abstract could possibly do justice to Dr. Rotch's very instructive paper, but the aim has been to present some of the essential points. He said in part:

There has been a great advance in the past few years in regard to the matter of infant feeding, and we Americans may take considerable credit to ourselves for these advances, because they have been almost wholly the work of American physicians.

Although there are many things which we do not know about preparing a suitable food for infants, yet recent advances have enabled us to formulate certain basic principles which are well proved, and which should be adopted and worked out by individual physicians in giving food for infants the test of actual clinical experience.

We have learned from a careful study of human milk that while the proportion of fat does not greatly vary from the first to the last week, yet the proportion of sugar is high

at first and gradually decreases to the end of the first year, while the amount of proteid is small at first and gradually increases until at the end of the first year it is about 4 per cent.

Since this is nature's method given us for a guide, it would seem to be wise to follow this plan in infant feeding. According to this general basic principle, an infant's food in the first week of life should be rich in sugar, and the proportion should gradually *diminish* to the end of the first year. On the other hand, the proportion of proteid should be low at first and should gradually *increase* to the end of the first year.

Professor Rotch then said that for years he had not agreed with those who had contended that starch added to food exerted an action favorable to breaking up the curd, but that recent experiments had proved that a certain small amount of a cereal added to the modified milk did exert this power and therefore he freely acknowledged that he had been in error upon this point.

Continuing, he said that everybody agreed that during the first few years of life the human infant possessed little power to digest starch, and that this power increased as the infant grew older; and therefore, because human milk is low in proteid during the first few weeks there is no need of adding a cereal to it if the proteid is in proper proportion, and therefore, if the starch in small amount

is added to the modified milk at the latter part of the first year, it is given the infant at the time when it has acquired the power to digest it, and at the same time it is present to help break up the caseine curd at the time the milk has become richer in proteid-material. All this is following out nature's own plan and seems to be eminently scientific and wise.

In adapting food to the needs of the infant, account should also be taken of what we have recently learned of the anatomy of the infant's stomach and of its physiologic and chemic functions.

We now know that the infant's stomach at birth is small; it grows quite rapidly for a few months, and then there is a period of rest from growth, and then growth is resumed. These facts serve to guide us in the amount of food that should be given at one feeding, and in determining the length of the intervals between the meals. If this principle is not borne in mind—and heretofore to a large extent the decision in this important matter has been largely left to the trained or untrained nurse—to repeat, if we forget this anatomical truth, the infant is often overfed, the stomach becomes distended, is then almost useless as a digestive apparatus, and trouble, of course, ensues.

Furthermore, recent investigations have shed much light upon the physiologic and chemic functions of the infant's stomach, and while we do not by any means know so much as we would like to know, yet we do know some helpful things.

When human milk is compared with cows' milk—the former is found to be much richer in sugar, and the latter much richer in proteid, while the proportion of fat does not greatly vary between the two. Now, remembering the basic principle learned by studying human milk; that at first it is rich in sugar and the amount gradually decreases to the end of the first year; and that at first the amount of proteid is small, and increases to the end of the first year, we see clearly that cows' milk must be modified so as to have at first more sugar and less proteid than it normally contains.

I, myself have always contended—though until recently I could give no good reason for my belief—that the form of sugar to be used must be milk sugar. Eminent specialists in New York and elsewhere have not agreed with me in this conclusion, and this matter of whether milk or cane sugar could be used, has been a point over which we have waged quite a wordy battle. As I have said, though my own clinical experience had

seemed to warrant me in insisting on the use of milk sugar in modified milk, yet I could not prove my side of the question no more than other eminent specialists could prove theirs. Recent experiments, however, have shed some light on this question, from the conclusions of which I derive some comfort. First of all, nature's plan has been proved to be to always use milk sugar—it is the form of sugar found in every animal's milk—and, of course, if nature does this thing there must be some good reason for the rule. Recent experiments conducted at Harvard University laboratory and elsewhere seem to prove that milk sugar is the form of sugar always used by nature because it exerts an action antagonistic to the pathogenic flora which are found in the intestines. Milk sugar prohibits the growth and action of certain pathogenic germs—while cane sugar does not—thus helping to make the intestine sterile and prohibiting the growth and toxin producing power of certain disease producing bacteria.

Formerly we endeavored only to get the proteids in the infant's meal in the right proportion, but recent investigations have given us new light upon this important point. We now know that not alone is milk made up of several varying constituents so that it serves the purposes of a meal, but we know also that the proteid material is also made up of several constituent elements and we now realize that it is not enough to have the right amount of total proteid, but we must also endeavor to have the right proportion of the several constituents which make up the proteid. Physicians had long known that when the infant fed on cows' milk vomited, that the curd was much larger than that vomited by the infant fed on breast milk.

Taking this fundamental fact as a basis, experiments have been conducted which prove that there is a good reason for this difference. The proteid of milk is now known to be made up of two different substances, lactalbumen and caseinogen, and it is also proved that in human, the ratio of lactalbumen to caseinogen is much greater than in cows' milk. If we take 1.50 as representing the total proteid desired, we find that the proteid of human milk is made up of lactalbumen in proportion of 1.00 and that caseinogen represents only 0.50. On the other hand, in cows' milk, out of 1.50 total proteid, lactalbumen is represented by only 0.80, while caseinogen furnishes 1.20. This is a large difference in the relative makeup of the proteid of human and cow's milk, and we must, I think, conclude that it should exert an important influence in our study of modi-

fying cows' milk so as to make it resemble breast milk.

In my own practice I have obtained much more satisfactory results since the modified milk has been prepared in accordance with what we have recently learned upon this important matter.

It should be added that it is impossible to prepare modified milk and insure the due proportions of the necessary constituents without high grade cream,—15 to 20 per cent. cream is used. The common 8 to 10 per cent. cream will not do. It is also important to know that even with high grade cream we have not been able to obtain the proteid constituents to an amount above 1.90.

The next important point brought out is that the personal equation must always enter into the problem of infant feeding, and the physician must give it due consideration. Whatever may be the rule for modified milk at a certain age, if it is found that the infant cannot digest and assimilate the amount of fat or proteid formulated, these constituents must then be reduced to meet the digestive power of that particular infant. While we can now formulate good general rules, every case of infant feeding is still to an extent a law unto itself.

Dr. S. C. Gordon, of Portland, in opening the discussion said :

*Madam President, Members of the Academy, Ladies and Gentlemen:*—We all have listened with a great deal of pleasure, I am sure, to the able address of the evening. What particularly we wished to know Professor Rotch has given us in the reports of the investigations at the Harvard Laboratory and the experiments of the laboratory workers. We well know and we are proud of what Boston has done in a scientific way for the advancement of the world. This sort of work she has done in the past, is now doing, and will always do.

My experience with babies has been large and I have always said that if I could have my way I would have all my patients babies. Babies are a great study, and one of the important factors that enters into their treatment, is, that they cannot lie to you. When they get older, I am sorry to say, they often acquire the habit of telling lies. The babies' symptoms are positive and I think they make very satisfactory patients.

This question of feeding babies has been a serious one to me all my life. For six years I practiced in the town of Gorham and had good milk to work with. That is something

that Boston people know nothing about, for I suppose that it would be hard to find a quart of good milk in the city of Boston, and there is not much more to be found in Portland. Therefore, they are obliged to go into laboratories to feed babies in Boston.

I think I have quite a reputation amongst the baby food agents for they always enter my office now with an apology. So-called babies' foods as peddled by these agents I don't have much use for, and especially in the feeding of young infants I make no use of the cereals. These baby food agent read you a long lecture, they know all about it, and they all talk as if they had had ten children and attended to the feeding of them all. They tell it too, with much more assurance and positiveness than Dr. Rotch has presented his views tonight.

I have been in the habit of modifying cows' milk with sugar and a little salt, but I don't use much lime-water. When an alkali is needed I prefer soda. My country babies thrived on their milk and at the end of the year would be found sucking a piece of beefsteak, and growing strong and healthy. With all the modern modifications which we have now, I don't see how the babies of 30 years ago lived at all, but they did.

I am sure that some doctors attempt to feed too much when children are sick. People don't starve to death so soon as some of us think. Give them plenty of water and but little food. Tanner lived forty days on a diet of water, so also did Succì. A baby has as good a chance. He won't die should you not give him milk, modified milk, or laboratory milk. It seems to me that we ought to learn something from these natural facts.

I have great respect for what Dr. Rotch has presented here this evening. For several years when discussing this question, we have said "Dr. Rotch says so and so," and yet the doctor comes here tonight in a true scientific spirit and acknowledges that he has made some mistakes in working out this intricate question.

I differ somewhat from Dr. Rotch in what he has said about using a sugar free milk in diabetes. I feed my diabetic patients on sugar. One man is now taking one-fourth of a pound a day and he has improved and there is less sugar in his urine.

I am very glad to have heard Dr. Rotch's lecture and am sure that in time great good will come from this laboratory work.

Dr. S. P. Warren, of Portland said :

*Madam President, Ladies and Gentlemen:*—The Academy is to be congratulated

that it has been able to hear the distinguished essayist of the evening. Not only in his position as Professor of Children's Diseases at Harvard, but also as a recognized author and writer he stands among the foremost teachers of modern Pediatrics, that department of medicine which is concerned with the health of our children. He is probably best known in that branch of his studies which he has selected for his topic tonight.—Infant feeding, too large a subject.—He has been the special advocate of two things—1st, that cows' milk is the best substitute for human milk, and 2nd, that it should be offered to the baby according to a definite method of preparation.

The subject of the artificial feeding of infants is one of the most important now before the medical profession and the American people. I have been a somewhat close student of the ideas of the essayist for several years, and in the main heartily agree with him. During this time I have been much interested in popularizing the systematic use of cows' milk, when a substitute is needed for human milk. Many of the old questions about its exclusive use by nurslings have already been answered. Some important problems of its administration are still unsettled. But of two facts I am definitely assured, 1st, it is the rare exception to find a nursling that will not thrive upon simple cows' milk, and 2nd, that proprietary baby foods, with which we are all acquainted by public and private advertisement, ought very rarely to be given to any child under one year old.

Take the first proposition. As has so thoroughly been stated by the distinguished essayist, when cows' milk does not agree with the child it is usually the fault of the nurse rather than of the baby. Every child differs from every other child in glory and also in its digestive organs, and there can be no cast iron formula for an artificial food.

The two practical objections to cows' milk as a substitute for mothers' milk are well acknowledged—the excess of casein, and the bacterial infection while being carried from the cow to the baby.

The first difficulty, the excess of curd, is gotten over by proper dilution; its assimilation is studied by careful watch of the fecal discharges and by systematic weighing. And here let me say, that the duty of the physician is far from being ended when he writes out a formula and with this prescription ends his oversight of the baby. He

should himself know the chemical and digestive needs of the individual child—that this one needs less fat and more casein, that this other one needs more fat and less casein, that the third needs a third arrangement of the fats, casein, and sugar. He ought to visit the nursery, and see that his directions about clean bottles and nipples, the systematic use of the measuring graduate, and the other little minutiae of milk preparation—are matters of routine not spasms of cleanliness.

During this year I have specially tried the so-called percentage system of artificial feeding. With each patient I give written directions how to mix the milk, and what will happen if the special mixture does not agree with the baby. I insist upon system in cleaning bottles, nipples and everything that comes in contact with the milk diet. As the results of the year's work I believe that the percentage system is adapted to the most general acceptance, and satisfies the peculiar needs of the baby for its first year.

Artificial feeding of nurslings is far from being a matter of guess work. It should be constantly under the supervision of the physician, but the physician himself must know something more about the subject than being able to write out somebody else's formula.

The report of the Milk Commission of the N. Y. County Medical Society, just published, says, in part: "In looking for a cause of the deteriorated milk found in this city it was finally determined that this was due to microbic agencies. From a chemical standpoint the milk was always good.

The number of bacteria in the milk depends on seven conditions:—1. Cleanliness of the barn. 2. Conditions of the cow. 3. Of the milker. 4. Of the utensils. 5. The cooling process. 6. The transportation. 7. The cleansing of the bottles before they are returned to the consumer. If the milk pail was not cleansed specially, 80,000 bacteria to the C. C. was obtained. After sterilization, this was reduced to 5,000, (30,000 being standard.) A low count of bacteria, if no antiseptics are used, means cleanliness."

For the second part of the subject, proprietary foods, in my opinion, are unfit substitutes for mothers' milk. They are more correctly substitutes for brains! There are four main objections to them: 1. They are made to sell, that is, made to suit the fancy of the buyer, rather than the stomach of the child. 2. They are secret compounds,



liable to change from bottle to bottle. 3. Even if as advertised, they nearly all have the indigestible starch, and, 4, they all are directed to be used with cows' milk. Voluble agents will seek to convince you that their special brand is the only true substitute for breast milk, and prove the argument by a picture of a fat cherub. I am opposed on principle to all these preparations and have not prescribed one of them for years. Dispensary and hospital records show, that more than 90 per cent. of all cases of scurvy and rickets in nurslings are directly associated with the use of proprietary foods and condensed milk.

When properly adapted, simple cows' milk is suited to the needs of every baby, rich or poor. It is true that fat babies and proprietary food are seemingly effect and cause. The explanation seems to me to be, that the child thrives on the cow's milk that is given with the food, rather than on the food itself, and that the child thrives in spite of, rather than because of, the food. It is certain that the excess of the hydro-carbons in the foods, (the flour, malted or not, and the sugars,) predisposes to scurvy and other diseases of malnutrition.

The attempt to support a medical proposition by citing cases is dreary work. The battle for the cause of proper artificial feeding must be fought both in the nursery and in the laboratory. This presupposes knowledge of the common sense of the subject, and the persuasive powers which will induce mothers and nurses to accept your directions. I am sure that cows' milk can be adapted to the special requirements of the baby in any household, without the need of expensive apparatus or special mathematical ability therein. The requirements are oversight by a competent physician—cleanliness in the nursery—and systematic weighing. If these are assured, the problem of artificial feeding for nurslings is, with rare exception, answered.

Dr. H. F. Twitchell, of Portland, said :

*Madam President, Ladies and Gentlemen:*—I shall not attempt to discuss this very learned paper, but wish to express my pleasure in having heard it and to testify to its excellence.

I am sure that we in Portland are willing to adopt things from Boston. Men elsewhere who know a great deal are not so willing to accept facts from Boston, but here in Portland we are. We have already adopted horseless carriages; we are ready to adopt Dr. Rotch's cowless milk, and soon we

hope to be able to raise up a race of hardy beef-eaters.

Dr. N. M. Marshall, of Portland, said :

*Madam President and Members of the Academy:*—My experience has been similar to those who have preceded me. While there was a time when we used baby foods extensively, we have most of us come back to depending largely on cows' milk in feeding infants.

If we cannot modify cows' milk on the plan suggested by Dr. Rotch, we would better in some cases stop feeding, for the time being, altogether. In order to carry out this plan successfully the physician must inform himself so he can be a teacher, and in order to be teachers we must first be taught. Therefore, I am very glad to have had the privilege of listening to this very instructive and scholarly address and am sure we all feel that our thanks are due to Dr. Rotch for coming here and delivering it.

Dr. Rotch in closing the discussion said :

I wish to say first of all that I have had no experience in modifying bad milk. It is, of course, no use to try to carry out this plan if the milk is not good to start with. You can sterilize bad milk to be sure, but you cannot destroy the toxins in it. My experience with milk is with the best milk in the world, for I know well that nothing worth doing can be done unless we start with good milk. The milk brought to our laboratory comes from the best dairy farms in the world. The cows are chosen by expert farmers, their surroundings are perfectly sanitary, every safeguard is exerted against the milk being contaminated, and, in short, the cows are cared for in a way that I am sure could not be approached—even in Gorham.

The keynote of the whole matter is good, fresh, cows' milk and we get it. The milk commonly found in the City of Boston is bad, but that from our dairy farms is good—much better than country herd milk.

I suppose Dr. Gordon was talking in rather a joking way, but I do not wish the impression to go out from this assembly that we do not get good milk in Boston for our laboratory work—

(*Dr. Gordon:* "I take it all back, doctor.") Our laboratory milk is good, fresh, clean milk so that it doesn't need even to be Pasteurized even when sent away. It is good milk and it approaches human milk. Human milk is sterile and pure and is our standard in preparing a modified milk.

## \*FRACTURE OF THE FEMUR.

By F. C. THAYER, M. D., of Waterville, Me.

**A** WELL worn subject, indeed, is fracture of the femur, and yet, not so threadbare, or so well understood in diagnosis and treatment, as always to prove a credit to the surgeon, or a satisfaction to the patient.

Of great importance to the surgeon, indeed, to the medical man as well, is this injury, because of its frequent occurrence, and its likelihood of happening in city and country alike, and among all conditions of men, which renders it essential that all medical men should have a fair knowledge of its symptomatology and principles of treatment.

It is hardly probable that any of us will ever essay the extirpation of the larynx, some may attempt an intestinal anastomosis, a few will remove an offending appendix, but all of us are more than likely to be called upon to render, at least, primary aid in a case of fracture of the femur. This then, is the only excuse I offer for presenting this old, old subject, older, indeed, than the history of our art, but of increasing interest, as its age advances.

This is an injury, too, which quite frequently gives rise to suits for malpractice, which of itself, makes it of much moment and importance to those of us who are called upon to treat it. In a total of 56,577 cases of fracture, 3,397 were of the femur, thus it will be seen that this injury is of very frequent occurrence, no bone, indeed, being more often broken, save perhaps, the clavicle. No period of life is exempt from this injury.

My own experience has given me a case in an infant only a few hours old, and in an old man over whose head had rolled the sun for more than ninety-two years. Youth, manhood, and age would seem to be predisposing causes of fracture in certain portions of the femur.

In children and adults, fractures of the shaft are more frequent, in adults, the lower extremity, and in old age, the neck. The bone may be broken at any point, but as it is always a help to systematize and classify any subject, because of greater convenience in description, as well as more completely conveying the impression to the hearer's mind, I will classify fractures of the femur, upon the basis of their location, into those of

the upper extremity, the shaft, and lower extremity.

The first classification, fractures of the upper extremity, may be further divided into those of the neck, those of the junction of the neck with the trochanter or fracture at the base of the neck, those of the great trochanter, and those of separation of the epiphyses, either of the head of the bone or of the great trochanter.

Sir Astly Cooper, and the great surgeons who succeeded him up to quite a recent date, have devoted much of time and effort in classifying and bringing out the diagnostic points between extra and intra capsular fractures, and dilated largely on the importance of the same. Believing as they did, that it was of great practical importance to determine whether the solution of continuity was within or without the capsule, much stress was laid upon the differential diagnosis, and I well remember when one whole hour was devoted to a consideration of that question by the late Prof. S. D. Gross, in his regular didactic lectures, and woe to the luckless student who failed to recall each point of difference.

As a matter of fact however, it is of not much practical advantage to know whether the fracture is within or without the capsular ligament, and it is quite true that many of these injuries are intra-extra capsular. A much more important question to determine is whether the fracture is of the impacted, or unimpacted variety.

Fracture of the neck of the femur is essentially an injury of advanced age, not always of old age, but past middle life. It is somewhat more frequent in old women than men. It is possible that the slight change in the angle, at which the neck joins the shaft, consequent to age, may be a contributory cause, but other senile changes, like enlargements of the meshes of the cancellated structure, a rarification of all parts of the bone, and a thinning of the cortical substance, are more frequent causes of this injury.

Another important matter, because of its contribution to the causes of fracture, as well as to the character of the injury, is the fact that the vertical plane of compact bone, the "femoral spur," so called, which projects into the interior, from the posterior cortical surface, plunging beneath the intertrochanteric ridge, in an endeavor to reach the other and outer edge of the shaft. This femoral spur, in young and adult life, serves to strengthen the concave and posterior portion of the neck, and in age, becomes absorbed by senile rarifying changes, so that it is sometimes completely removed, and cannot be

\*Paper read at the December meeting of the Kennebec Medical Association.

distinguished from the surrounding cancellated tissue, thus lessening the strength of the bone at that point.

It is frequently so difficult to determine the exact seat of injury, and is of so little practical moment, that we will describe the two varieties of this lesion together.

Fractures through the neck, near the head of the bone, are very generally unimpacted, while those occurring near the trochanter, and at the base of the neck are impacted. It ought to be remembered that impacted fractures readily unite, while those which are unimpacted frequently do not.

This injury is often associated with very slight accident, a misstep, a trip over some little obstacle, a stumble, a fall upon the knees, or upon the trochanter. Without doubt it frequently happens that the injury precedes the fall.

*Symptoms and diagnosis.* The symptoms and signs upon which a diagnosis is based are various and deserve great care and consideration. It is always well to get as clear a history of the injury as possible, the nature of the violence, whether it is of a slight or more pronounced character. The patient ordinarily, is unable to use the limb, or rise from the horizontal position. There may or may not be a contusion over the trochanter.

Pain is present in the hip, which is rendered more intense by motion of the bone, or pressure over the trochanter, indeed, the limb is helpless, with the exception of an occasional case, where the impaction is of the firm, dovetailed type, when there is a possibility that the patient may walk, even without the aid of a stick.

It is of course, always well, to remember this notable exception, to a very general rule.

While the patient is upon his back, it will be impossible for him to raise his heel from the bed, or to rotate the foot inward.

The foot is everted, the leg slightly flexed upon the thigh, the thigh upon the abdomen, and the whole limb rolls outward in the most helpless manner. As a rule the foot is everted whether impaction is present or not, if the impaction is of the anterior portion of the neck, inversion may exist. This is rare, because of the fact, that the cortical substance of the anterior part of the neck does not become thinned by the senile changes, while the posterior portion is subject to these rarifying changes, as well as the femoral spur, which has been alluded to before and the fracture is rarely of the anterior portion of the neck.

There is also a fulness, quite manifest

below the groin, or in the outer upper part of Scarpa's triangle, slight shortening, an inch or half an inch, sometimes not more than  $\frac{1}{2}$  of an inch generally exists. The shortening may increase to 2 inches in two or three days. The trochanter will be found above Nelaton's line, and approaches nearer Bryant's line than it does on the uninjured side.

An eversion which is caused by impaction of the posterior portion of the neck, can not be inverted, neither can an impacted inversion be everted, unless, indeed, in doing so, the impaction is thus broken, hence great care should be exercised in conducting an examination, that the manipulations should be of such a character as not to disturb the impaction if it exists.

When the inversion or eversion exists to a marked degree, the possibility of a dislocation should be considered. With strong eversion and preternatural immobility, a dislocation of the head of the bone forward must be excluded, and this is done by observing the absence of the head of the femur from the pubic region, and the lack of strong abduction of the limb. With marked inversion and preternatural immobility, we have to eliminate a backward dislocation, which is accomplished by noting, that the limb is not adducted, neither is it so firmly fixed, as in dislocation and the head of the bone can not be felt upon the ilium, neither is it absent from the cotyloid cavity, all of which can be determined by palpation.

Crepitus is of course a positive sign of fracture, if it can be obtained, but it should never be lost sight of, that nothing but gentle manipulation should be made to show its presence. The examination should be systematic and full, but not attended with any degree of violence. The clothing should be removed, and the patient placed upon some hard, even surface. A table is the best, but a hard mattress or a folded quilt upon the floor will answer the purpose.

An anæsthetic may or may not be used. If used, exercise greater care than if it is not used, because of the danger of converting an impacted fracture into a complete one, which ought to be avoided. We should always remember that only gentle, firm traction in the line of the axis of the bone is permissible to determine if crepitus exists.

Palpation of the bone, with the thumb in front, and the fingers behind the trochanter, will discover if any irregularity exists, or if there is any tenderness or thickening of the bony structure.

The limb should then be measured, and a comparison made with its fellow. The leg

should be brought along side of the other with care, and be kept in position by an assistant, while the measurements are taken. The presence of a pre-existing injury, or malformation, should be observed, any difference in the tibiae ought to be taken into consideration in making up the relative measurements of the two limbs.

Sometimes it is not possible to bring the two legs parallel, under such circumstances they should be placed in the same relative position to the median line, and the measurements then taken. The tape should be applied from the anterior superior spinous process of the ilium to the internal malleolus, while the patient is flat on his back.

Two other methods of measurements may, and are, frequently, of service. They have already been referred to in this paper, but because of their value, as well as because of their non-use by many, I will describe them. A line drawn from the anterior superior spine of the ilium, to the tuberosity of the ischium, is known as Nelaton's line, the top of the trochanter lies at, or just below this line, with shortening in a fracture of the neck, the trochanter will be found more or less above.

The other plan of recognizing shortening is of service, and quite simple. The top of the trochanter is marked upon the skin, a line is dropped perpendicularly from the anterior superior spinous process of the ilium to the table upon which lies the patient, this should be done on the uninjured, as well as on the injured side.

In fracture of the neck, with shortening the distance from the top of the trochanter to this, Bryant's line, will be just as much less than the distance between the same points on the injured limb, as there is difference in the length of the limbs, or in other words, when there is a fracture, with displacement, or shortening, the distance from the trochanter to the perpendicular line will be less than the same measurement will show on the uninjured side.

Dr. Allis, of Philadelphia, has called attention to a relaxation of the fascia lata between the ilium and trochanter, and just above the knee on the outer side of the leg, as a diagnostic point.

**Prognosis and result.** The danger to life is not inconsiderable in this injury. The influence of age upon the prognosis is very great, and the older the patient, the more cause for fear of a fatal termination. An elderly patient may die of shock within a few days, or hypostatic pneumonia may develop and prove fatal within a week. Bronchitis,

fat embolism, pulmonary thrombosis, marasmus due to long confinement in bed, may each produce a fatal result.

In other cases the prognosis may be unfavorable, so far as the function of the limbs is concerned. These are fortunately, however, the exception, as the rule is recovery with a more or less useful limb. If immobilization can be assured, union will occur in the great majority of cases. The impacted cases will unite, and the unimpacted may with proper care. Some shortening is the rule, a little limitation of motion, eversion of the foot, with some limp in the gait, may be expected. Even with non-union of the neck, a fairly useful limb may be hoped for.

**Treatment.** The ideal may be sought, but need hardly be expected, in the treatment of fracture of the neck of the femur. Complete restoration of form and function can not be promised. The patient should be made as comfortable as possible during his confinement. Especial care should be paid to the diet, and to all that goes to make up the every day routine of his life. The pulse is to be carefully watched every day, as well as the respiration, the condition of the bowels and kidneys must never be lost sight of. The possibility of bed sores must be remembered, and care and attention paid to every point of pressure, however slight.

It ought never to be lost sight of that the patient is to be treated rather than the injury. The very first thing in the treatment of a fracture of neck, as well as the shaft, is to obtain a comfortable, firm hair mattress. It is well to put several wooden slats under the mattress, about eight inches apart, across the bed, so as to prevent sagging of the mattress. Place the leg in as natural position as possible, and apply the extension strips of adhesive plaster, as high as the perineum, which had best be held in place by a roller bandage. A weight of about five pounds should be applied, and the leg carefully rotated, and placed in an approximate normal position. Remember not to use any force in rotation or extension.

The foot of the bed should be elevated five or six inches, for the counter extension, long and heavy sand-bags should be placed on either side of the leg, to serve as a support, and give a sense of security. Some sort of a device should be placed under the heel, to keep the pressure off from its point. I am in the habit of using a ring of oakum, so that the weight is distributed to the periphery, rather than the center, and I may here say, I have never yet seen a bed sore from any case of fracture, which I have had to treat.

Another device, which I have always used, is a long T splint, which extends from below the foot to the axilla, and is kept in place by a swathe about the body, and several strips of bandage applied over the splint and about the thigh and leg. This serves an admirable purpose in keeping the foot in a vertical position.

This form of treatment is the ideal way, in accordance with the simple old time method of extension, and partial immobilization, and the result is very good in a great many cases.

There are various other methods which are said to give better results, such as the more absolute immobilization by the use of the Thomas splint, Sayre's traction splint, Phelps's hip-splint, associated with pressure over the trochanter, traction can be used in conjunction with these splints, and in proper cases is undoubtedly of great value. An explanation of the application of these several apparatuses can be found in all the recent text books, treating of fracture and dislocation, and I will not trespass upon your time, with their description.

Fracture of the trochanter is caused by direct violence, either a blow, or a fall upon the process. The fragment is displaced by action of the external rotator muscles, which being attached to it, draws the fragment upward and backward. The diagnosis is made by the presence of crepitus, when the trochanter is grasped and moved, also by determining that while the limb itself is not shortened, yet the trochanter will be found to be nearer Bryant's line than on the uninjured side.

The treatment consists in immobilization of the limb, abduction, with the leg rotated outward, and a compress over the trochanter kept in place by a firm band, taking care that undue pressure is not exerted. Separation of the epiphysis of the head of the bone, or of the trochanter, are exceedingly rare, and are to be diagnosed, and treated on the same principles, that obtain in the management of the injuries just discussed.

Fractures of the shaft may be divided into those of the upper, of the middle, and the lower third, although they may occur at any point, and there is more likelihood that the injury will be at the central portion of the bone.

Fractures of the shaft are usually oblique, except in children, in whom they may be transverse. The causes are various, direct and indirect violence, and muscular contraction being the principal ones, indirect violence, being the more frequent cause. The so-called spontaneous fractures occur much

more frequently here than elsewhere, because of the great leverage afforded by the length of the bone. There can be but little doubt that the very large and powerful muscles which are attached to, and surround the femur, conspire to produce this injury.

Fracture at the upper and lower extremity, are more frequently occasioned by indirect violence, while those at, or near, the middle, are caused by direct violence. Fractures of the shaft give rise to, by far, the greatest number of cases of shortening, notably, because of the small size of the bone, in comparison to the weight it has to support, and especially because the muscles, which, surround, and are attached to it, are so strong and powerful. Shortening is nearly always immediate and pronounced, frequently, great swelling exists, and the limb lies helpless, and twisted. Pain, preternatural mobility, deformity, marked lateral rolling of the leg below the injury, and crepitus are one, or all, in evidence.

Displacement is marked, and is due to the cause producing the fracture, the contraction of the strong thigh muscles, and of the swelling of the limb beneath the fascia, which is thereby broadened and shortened. The lower fragment usually passes behind, and to the inner side of the upper, and may be rotated inward or outward. Angular displacement is sometimes pronounced, and is pretty generally present in some degree.

The upper fragment is usually inclined forward and outward, in fractures of the subtrochanteric variety, and is due to muscular contraction of the gluteal and psoas muscles upon itself, and of the adductors and flexors of the leg upon the lower fragment. The upper fragment is thus more than likely to be tilted upward and outward, a fact which must never be lost sight of in the treatment.

Because of the situation of the bone, deeply beneath muscles, irregularity in the outline is not readily observed, by the sight, or touch, although in thin subjects, an angular displacement may readily be seen. A comparative measurement of the two limbs is the best method to determine their difference, and this, in order to give a correct index, must be accomplished in accordance with a definite plan, taking especial pains that the conditions are alike in both limbs.

The two legs should form the same angle with the pelvis, and this is best obtained by stretching a tape across the abdomen, from one anterior superior spinous process to the other, another tape should be drawn from its

center, downward, at exactly right angles to the first, then place the ankles at equal distances from this line. This will give a perfectly straight line from the tip of the nose, the middle of the chin, the episternal notch, the umbilicus, the symphysis pubis, the mid point between the malleoli; the transverse line, joining the superior processes of the ilia, will be at directly right angles to it.

In this position, with the patient on his back, on a flat, hard, firm surface, his arms parallel to the axis of the body, the head and shoulders on the same plane with the body, with no pillow under either, the best conditions are given, to make correct measurements, which should be taken from the anterior superior spinous process of the ilium to the internal malleolus, any variations from this normal position will be likely to be attended with important errors of measurements.

Of course a pre-existing injury to either limb should be taken into consideration. Should it not be possible to place the injured limb by its fellow, the two limbs may be laid in the same relative position to the median line, and the measurements then taken.

In the early days, the treatment of this injury, was in the straight position, and by the use of either short lateral splints, or with long splints with or without extension, and this was the practice until about the middle of the eighteenth century, when Percival Pott wrote his remarkable treatise on fractures, in which, he advocated, what he called, the "physiological doctrine," which assumed that those muscles, which, by their contraction, tend to produce shortening, can be sufficiently counterbalanced by posture without the assistance of extension. So that his treatment of a fracture of the femur was simply to flex the thigh upon the abdomen, the leg upon the thigh, and laying the limb on its outer side on the bed, and leave it alone. It hardly seems probable that such treatment could have been seriously considered. But it is true, that while, only a few accepted in full, these views, yet the great mass of surgeons adopted in general, his teachings, with some modifications. They preferred to place the patient upon the back, and put the limb on a double inclined plane, thus following out in part, at least, that doctrine. Since his time, many and various, have been the splints devised for the treatment of this fracture, most of them are now considered useless, and had best be forgotten.

The first fracture of the femur, I ever saw treated, was with the long outside splint of Physick, and a short inside splint, extending

from below the sole of the foot, to the perineum. Extension was made by pulling the limb down and fastening it to the transverse bar, the counter extension being maintained by a perineal band, fastened to two slots in the upper part of the splint, then the whole was covered in by a roller bandage, and that was less than forty years ago. The pressure upon the foot and perineum must have been something fearful. Under this regime, sloughing perineal and feet, and general discomfort were the rule, and it became necessary, many times, to fasten the straps with a padlock, so that the unfortunate patient could not loosen them.

Fortunately, we live in a day, in which, rational treatment of this injury has full sway. The objects of treatment, are first, to reduce the fracture, then to maintain the reduction absolutely, till union is established, and the limb once more resumes its normal function. This can best be accomplished in all but two varieties of this fracture, by extension and counter-extension.

It so frequently happens that the patient is injured at a considerable distance from the place where the fracture is to be treated, that a few words as to the emergency treatment and the transportation of the unfortunate may not be amiss. The limb should be extended upon some firm surface, an improvised long splint, padded with towels, sheets, pillow-cases, or possibly some articles of clothing, should be placed on its outer side, another on the inside, padded in the same manner, a padded board extending from above the hip to a little below the middle of the calf, and as wide as the thigh, should be placed underneath, and all kept in position by handkerchiefs or bandages. These will serve to keep the injured member straight and the foot in a vertical position, and will help very much to reduce to a minimum the pain and discomfort consequent to the unavoidable motion in transportation.

It is advisable to always put the fractured thigh in a temporary dressing until the requisite arrangement can be made for the permanent one. The patient ought always to be anesthetized to facilitate the examination, as well as to overcome the contractility of the muscles.

Prior to the administration of the anesthetic, the surgeon should personally see that all the various dressings are prepared, and at hand. It should be remembered that these dressings are to remain in place four or five weeks, and that the greatest care is requisite, both as to the dressings, and the manner of their application.



All these preliminary preparations having been made, the surgeon should next conduct an accurate examination, and determine the exact condition of the fracture. Traction should be made in the axis of the limb, by grasping the thigh above the condyle with the right hand, the left holding the leg just above the ankle, thus will be determined the amount of force necessary to reduce the fracture, and approximate weight required to maintain the reduction.

All fractures of the shaft, save those of the subtrochanteric and supracondyloid variety, are best maintained by some modification of what is known as Buck's extension apparatus, the materials of which are adhesive plaster, five strips of which should be one and one-half inches wide, three of them being long enough to go around the leg, just above the ankle, just above the condyle, and one just below the point of fracture. The other two are to be sufficiently long to extend spirally from the seat of injury to the malleoli.

It has been my habit, for a great many years, following the plan of Hamilton, to use one long strip for the traction piece, with the foot piece or spreader folded into its center, in accordance with the pattern I will now show you. Of course, this may or may not be done, as the individual surgeon may wish, and it is not at all essential that this exact plan should be observed, and yet, if you do it in this way, you will find that the fit will be always right, and I am sure you will be so well satisfied, that you will always pursue this course. I usually carry this pattern when going to treat a fracture of the femur. Make the length to correspond with the length of the individual leg. It should be long enough to extend from just below the fracture down the side of the leg to two and one-half to three inches below the sole of the foot, and up the other side of the leg, to a point opposite the starting place.

You will observe that the widest part of the plaster folds over the foot piece, which is one-half inches thick, and three and three-quarter inches long by two and one-half inches wide, and is so cut and folded, that it reinforces the plaster at its weakest point.

Have ready also, a curved or straight ham splint, padded and covered with cotton cloth, if this splint is straight, it should be so padded, as to conform to the concavity of the posterior portion of the knee. There will also be required three coaptation splints for the anterior, inner, and outer surface of the thigh, these should all be padded, evenly, with three or four thicknesses of sheet wadding, and covered with cotton cloth.

I am in the habit of having three or four

pieces of bandage sewed on to the back of the ham splint, at right angles to its axis, which shall serve to keep all the coaptation splints in position, when once they are placed there.

A long outside splint, four inches wide, made of wood, extending from the axilla, to five or six inches below the sole of the foot, should be prepared. At the lower end of this splint, a cross piece should be fastened at right angles so as to keep the splint upright. A pulley arranged as may be best, towels, a piece of window cord three feet long, sandbags, either four short, or two long ones, some device to keep the bed clothes off the foot, blocks of wood, or bricks to put under the foot of the bed posts, a ring made of oakum to keep the heel from pressing upon the bed, will complete the essentials for this dressing.

All these things being within easy distance, the patient having been laid on such a bed as has been described, and having been etherized, and the fracture examined, the whole limb should be thoroughly washed, and shaved and rendered perfectly dry. The extension adhesion strip should then be applied, beginning at just below the seat of fracture, and carried down upon one side, and up on the other, taking great care to have the foot piece parallel to the plane of the sole of the foot; the three strips should then be applied, just above the ankle, above the knee, and just below the injury, the two spiral pieces should extend from just below the injury, to the malleolus of each side. A roller bandage should then be applied from the toes to the upper strip which encircles the thigh, evenly and firmly. The coaptation splints are then placed in position, the posterior one reaching from the gluteo femoral fold to the middle of the calf, the anterior one from the groin to the upper border of the patella; the internal splint from the perineum to the adductor tubercle, and the outer one from the trochanter to the external condyle; the whole confined by the strips of bandage, previously sewed on to the posterior splint.

While these splints are applied, and fastened in place, be sure that steady traction is maintained. The long splint which is also properly padded, is then placed in position, and retained by a swathe around the body, and two or three strips of three inch bandage about the splint and leg. The weight and pulley should then be put into service, giving place to the traction previously maintained by the assistant.

The rule which I have generally followed, governing the amount of weight to be used, is a pound to a year up to twenty, (I have

used as much as thirty.) Of course a sufficient weight to overcome the contraction of the muscles is what is required, be it more or less.

The sand-bags are laid alongside of the limb, both inside and out, to steady and support it. The bed is then raised at its foot four inches to maintain the necessary counter extension, and I have sometimes used in addition a perineal band, which is fastened to the upper bed post. The oakum ring should be placed under the heel, and the line of traction so made that it will serve to lift the heel a little from the surface of the bed.

Every day inspection of the limb should be made, and every other day measurements ought to be taken. After a few days, a little of the weight may be removed, if it is found unnecessary to maintain the length of the leg. The heel and other points which may be subjected to undue pressure require careful watching from beginning to end of treatment.

A removal of the three coaptation splints, and a readjustment of the posterior one, with careful rubbing of the thigh, will serve a good purpose in stimulating the absorbent vessels, and assist in a maintenance of the circulation. Indeed, it is a constant vigilance which is the price of securing a good result from a fractured thigh.

To recapitulate, then, it is necessary to look carefully after the extension, and counter-extension, to prevent shortening, to see that the leg is slightly abducted, and the tension made in that axis to overcome any outward bowing at the seat of fracture, to be sure that the long side splint is kept in place to maintain the foot in a vertical position, and prevent eversion and an outward rotation of the leg; and also, to see that sufficient and proper padding is used to overcome any tendency to a backward displacement of the fragments. After four weeks, the dressings may be removed, the leg thoroughly examined, and dressings reapplied.

Union is complete in from six to eight weeks, depending upon the age of the patient. After eight weeks all dressings may be removed, the limb washed, and anointed with oil. The patient had best be allowed to lie in bed a week without any retention apparatus. After nine weeks, the patient may be permitted to get up, and go about with crutches, the limb being protected by a plaster-paris splint, extending from below the knee, to above the hips. Not until the twelfth week is it proper for him to bear any weight upon the leg.

I am satisfied that much of the shortening, in this fracture, is due to a too early use of the leg, bearing weight upon a still softened bone.

If your great desire is to get a satisfactory union, and a comparatively full length of bone, keep your patient off his leg till after twelve weeks. In the treatment of fractures of the subtrochanteric variety, bear in mind, that the tendency of the upper fragment is to be flexed, and abducted, that of the lower, to be adducted.

It is about impossible to lower the upper fragment to the line of the lower one, so that the lower one must be brought up to the upper one. This is best accomplished by placing the limb on a double inclined plane, and maintaining extension in the line of the thigh thus placed.

The supracondyloid fracture requires much the same treatment.

The upper end of the lower fragment is generally pulled backward by the contraction of the gastrocnemius muscle. This can be quite readily overcome by putting the leg on a double inclined plane, and maintaining slight traction if possible upon the lower fragment, and pushing forward the lower part of the upper fragment, by carefully adjusted padding.

The treatment of separation of the epiphysis of the lower end of the femur is upon the same general principles as the last variety mentioned. Although the only one I ever saw, a compound injury, was treated by extension, and counterextension, with most satisfactory results.

The treatment of fractures of the femur in children over ten years of age is the same as already described. In younger children, the Cabot posterior wire splint may be used, or that which has given me entire satisfaction, vertical suspension of either or both thighs, a swathe fastens the child to the bed, or a Bradford frame, and extension is made by adhesive straps in a vertical direction, the thigh being flexed to a right angle with the body, coaptation splints being used as heretofore described.

It is astonishing to observe how quickly the child accommodates himself to the new position, and how perfectly contented he appears to be.

The so called ambulatory treatment which has attracted the attention of surgeons, more or less, I will speak of simply to condemn, so far as its application to private practice is concerned, and I do not think the time will ever come when it will be possible to treat a fractured shaft of the femur safely, without absolute rest in bed.

## SOME PHASES OF QUACKERY.

By P. J. NOYES, of Lancaster, N. H.

[Continued from Last Week.]

**O**NE very discouraging factor which confronts one in an attempt to illuminate a subject and give a different direction to the trend of thought, is the fact of that peculiar and unaccountable quality of the human mind which induces an undefined feeling that a thing to be of greatest value must have its origin a long distance away; also that any expression of thought must in like manner emanate from a distance; and the faith in the excellence of the thing or the validity of statement increases in a geometrical ratio as the distance or obscurity increases. This fact is an important element in the success of quackery. Should the extravagant, absurd language be used by a person in one's own town, which characterizes all quack medicine literature, it would be simply treated with derision. The quack avails himself of another element of human weakness, which is explained by a perfectly well known psychological law—the law of suggestion.

It is the responsive quality in the human mind to this law of which in all ages empirics, scoundrels and sharpers have taken advantage, and which has contributed more than all other forces combined to the fearful sum of human misery.

This unfortunate condition of our mental constitution has been evolved from our low origin, the actuating force of which is fear. Fear is the primitive temper of the human race, and is the progenitor of superstition, which has been the most active factor in human affairs. It has ever been on the stage of action, now playing this role and then that. It was the author of the horror of the world—burning and torturing poor innocent, helpless women and children as a means of exorcising evil spirits to ward off disease.

It has supplicated the Supreme Being to stop the ravages of epidemics when the cause was to be found in their own ignorance and folly.—It has had unquestioning faith in the Royal touch to cure all diseases, and the faith exhibited today in the marvelous as materialized in the remedies and statements of quackery, is only another expression of that ever-present human mental weakness. The quack medicine fraternity has discovered—not through logical deductions, however, for that would imply a higher degree of intelligence than is ordinarily imputed to the "profession," but by observation they have

discovered that by taking advantage of the psychological misfortune which afflicts humanity, their success is assured if the individual possesses sufficient ingenuity in the use of language to excite a sufficient amount of terror in the minds of his prospective victims to bring into action the process of autosuggestion. In other words: every little insignificant functional disturbance is carefully and craftily enumerated, and magnified into the most serious symptomatic condition. e. g.—in kidney remedies every backache is made to indicate a serious kidney trouble which will in a short time prove fatal unless this particular infallible specific is promptly resorted to and persisted in until all of the organs of the body—"heart, liver and kidneys" are restored to their proper functions. If any doubt still remains in the minds of the afflicted, it is at once dissipated by the presentation of the picture of a "beautiful life" which heard of this wonder just in time to procure a dozen bottles and be "snatched from an untimely grave."

The kidney is the most prolific field for the exploitation of the quack, for two reasons. The first is that it is a matter of common knowledge that no pathological condition is so serious as of that organ, and therefore it becomes an easy matter to excite alarm. The second is that all people have a backache at times, and from the influence of this kind of literature the impression has become almost universal that a backache does proceed from some trouble with the kidney. As a matter of fact a backache is never an indication of kidney trouble.

In a recent talk by Dr. S. C. Gordon, before the Academy of Medicine and Science, Portland, he stated in this connection that a backache not only does not indicate a kidney trouble, but it is the surest sign that there is no such condition.

Could the statement of simple facts become impressed on the mind with the same conviction as does the wild, irrational, grotesque, extravagant falsehoods of the ignorant, designing quack medicine highwaymen, what an amount of unnecessary mental suffering might be avoided, as well as a great amount of money saved with which to buy books and other necessities and luxuries, to increase the sum of human happiness by elevating life to a higher and broader intellectual standard.

Added to credulity, fear and superstition the quack has learned to work an equally available element of human weakness, that of vanity; so that the following becomes the comprehensive order on which an advertising

assault is planned. First excite the imagination into the belief that every symptom enumerated—which includes all that are real or imagined—is possessed by the reader; terrify him by the assurance that every one of these symptoms, if allowed to take its course will prove fatal; play upon his credulity until he believes that the particular remedy under consideration is his only chance for life, follow this up with an appeal to his vanity, by an implied assurance that he will be asked for a testimonial if “saved from the grave,” which together with his photo, will be published in the papers throughout the country. When this program has been gone through the victim is generally within the toils of the conspirator, and becomes an inevitable customer for one or several bottles of the “great life saving specific.”

The writer is personally acquainted with the individual who first conceived the bright idea of utilizing the vanity of silly women and brainless men, for advertising purposes. He had been a horse jockey all his life, and presumably in addition to his genius in that line had some knowledge of horse remedies. This constituted his qualifications for entering the field on the sacred mission of healing the sick and “bringing health and happiness out of the depths of misery and despair.” He made a great hit and a fortune. The whole quack fraternity became his imitators, and thus nearly every newspaper is embellished with the photographs of healthy, vigorous, happy men and women, young and old, who, had it not been for the various “wonders” would now be mouldering in the grave, instead of furnishing inspiring object lessons of the potency of the healing art, as exemplified by horse jockeys and others of like professional accomplishments.

The *rationale* of the whole scheme is simply this:—the shrewd advertiser knows that nothing ails nine out of every ten of his prospective victims—except what is induced by his poisonous suggestive advertising, and will of necessity be “cured” by his nostrum, and he will receive the gratitude—and money—of his many victims, that they will regard him as their saviour, and never cease sounding his praises and of recommending his medicine to their suffering friends.

The most fiendish and diabolical phase of this suggestive advertising is carried on by that army of ghouls who have selected for their prey the young of both sexes. In their advertising, language is used too indecently suggestive for repetition—bordering on the obscene. They begin by picturing types of beautiful, perfect womanhood, and vigorous,

youthful manhood, dwelling at great length on the grandeur of these perfect types, conveying the impression to the minds of the readers that they are merely normal, easily attained by any one, by means which they will presently explain. Then in contrast with this beautiful picture is given the results of “youthful indiscretions.” This is accomplished by means of coarse, revolting representations of human wrecks, accompanied by descriptive language, coarse, vulgar, unfeeling, brutal. All designed to work on the sensitive natures of their victims, impressing them with the fearful possibility that every insignificant symptom presages a rapid descent to the depraved type which they have portrayed. They dwell on the joys and delights of a happy home, where husband and wife are congenial, and then draw the contrast; a ruined home, divorce, madness, suicide, and the whole category of horrors resulting from domestic infelicity; giving a detailed description of the physical causes leading to the disaster pictured, in language so broad as to bring a blush to the face of the innocent girl who reads it.

All this as intended works with disastrous effect on the sensitive natures of the young, producing an abnormal mental condition approaching insanity, when as the only relief in sight they write the *thug* for advice—This done the object is as good as gained. The victim is immediately inundated with literature and letters all intended to increase the terror already produced, culminating of course in the most solemn assurance that the only salvation from the horrible pit yawning beneath them is in the “wonder” which this remarkable person has discovered.

Then the real process of demoralization and ruin commences. The victims brood over their supposed troubles until all the diseases which they first imagined become real, through the inevitable influence of the mind over physical conditions. They come to have an abnormal appetite for quack medicine literature, which is read with avidity and each panacea is tried in its turn, always looking and hoping for the relief which never comes, and they go through life a burden to themselves and others, and go down to a premature grave.

This is no fanciful picture but descriptive of a condition, with which every medical man is familiar, and which numbers its tens of thousands of victims every year. The number of this class of robbers living today on the blood and lives of their innocent victims, would astound one not familiar with the facts. They may be counted by the thousands. Every large city is infested with them. They

have elegant offices, live luxuriously, are received in the "best society," are addressed as "doctor," "professor," etc., go to church regularly and pay liberally toward the support of the gospel. Many work the "religious dodge," as "returned missionaries" "retired ministers," etc. This is found to be the most effective scheme, as by this means they easily secure the help by way of testimonials and recommendations, of the very class, which of all men should be the ones to enlighten and defend those who come under their personal influence, instead of straining at a gnat and then swallowing the camel, which is debauching, and destroying the innocent before their eyes, and with their help too.

There are various laws in force against the circulation through the U. S. Mails of obscene literature, lottery tickets, etc., all of which is righteously just; but at the same time, literature infinitely more demoralizing than that which the law is designed to reach is not only allowed in the mails, but is encouraged by having the lowest postage rates.

The Louisiana Lottery, bad as it was, was immaculate and a means of grace in comparison to the class of literature under consideration—the lottery only robbed people of their money, but quack literature and quack medicine robs them of happiness, health and often their lives, as well as their money. Could there be a greater travesty on justice?

The following illumination of the whole secret quack medicine business, from the pen of the well known educator, Prof. Quackenboss of Columbia University, is most impressive, and coming from so eminent a man should be very convincing:

"A patent medicine is a medicine whose composition is concealed in order that it may be advertised as a marvellous specific. It is usually composed of some worthless simple other than represented, or contains substances dangerous to health and life. As a rule is got up by some man or woman with little or no pretension to medical education, who flourishes like a parasite on a deluded public, and trifles with human life, recklessly indifferent to consequences. Many of these persons are criminally responsible for obtaining money under false pretences (their goods not being as represented), as well as for fraudulently administering drugs that undermine the bodily and mental health of those who buy—and all this under the pious pretext of renovating an exhausted body and restoring the powers of a jaded brain.

The patent medicine business is an immense business, and like a great octopus extends its sucker-covered arms into the very vitals of

trade. Half the rural newspapers would be forced into bankruptcy were it not for the lying advertisements of the manufacturers of proprietary drugs. The country pharmacists would have to put out their lamps; the country stores would hardly pay their expenses; the printing establishments would see the traditional wolf stretched out on their door-mats, if it were not for the sagwaas, vegetable compounds, nervines, and golden remedies which are advertised "to bring men and women out of torture worse than death." The object of these advertisements, placards, and pictures, is to induce this torture by impressing thought-forms on the thought machines or brains of credulous persons—who are physically well, and among whom disease increases in the same ratio as patent-medicine advertisements. The diseased thoughts, and thoughts of disease suggested thereby to the objective self and then transferred to the subliminal self, are brought to a focus in the material bodily organs, and imaginary sickness, even more prolific of discomfort and pain than actual organic disease, is the result. The charlatan has attained his object; he has produced a state of mind in harmony with his false representations, and fattens thenceforth on the distresses induced thereby in his victims. The bold offensive, and terrifying advertisements of the day represent a systematized attempt on the part of a legion of empirics to create disease for the benefit of their pockets. \* \* \* A moral may be drawn from the credulity of the modern public, who are ready to believe every tale of miraculous cure reported and illustrated in the daily press. The greater the improbability, the more readily do the gulls seize and swallow it—faith cures, mind cures, gold and other drink-habit cures, Christian Science cures, consumption cures, cancer pastes and plasters, and a thousand embrocations, elixirs, salves, syrups, and potions. Each numbers its disappointed victims by the thousands, and experience seems to be a very poor teacher, so far as these fad-chasing sufferers are concerned. The philosophy of such credulity is as follows: The subjects want to be cured, and by exaggerated suggestions they deceive their own subliminal selfs into monstrous beliefs regarding the possibilities of cure, and rise time after time to the most clumsily offered lures. Similarly, through auto-suggestion, some patients become persuaded that they are not suffering from organic disease, pass on through the several stages of its progress without invoking the aid of a physician, and find themselves face to face with death before they are undeceived."

The magnitude and power of the quack medicine interests in this country is probably not realized, and would be startling could the exact figures be had. It is within bounds to say that this modern fetich is costing the people of this country more in direct money expenditure than the annual expense of supporting the government. This does not take into account the large and more important expenditure in mental suffering, moral degeneration, increase in chronic disease, and the consequent shortening of life.

The power which this enormous business exerts is shown in the subservency of the press, illustrated by its comment and editorial endorsement of the absurd claims of quackery, and commending to the favorable notice of its patrons, that which the superior intelligence of the profession, can but recognize as frauds. There are many honorable exceptions among the higher class journals which not only exclude all advertising of this class, but frequently expose some of the most flagrant frauds.

However, as newspapers are conducted on a business basis, and to make money, they can hardly be blamed for accepting such business as is offered. Criticism is only called for when editorial countenance is given to transparent frauds, and when its great power is used to deprave instead of enlighten.

Quackery, realizing its almost supreme power, accomplished through working on the fears and susceptibilities of the people, saw but one obstacle to the perpetuation of that power; and that was, the fear of exposure through the drug trade. In order to protect itself from this danger, it conceived the idea of creating a public sentiment, which should be an effectual bar against such a contingency. In order to bring this about the public press readily lent its editorial influence to the demand of the conspirators, and there exists today, a well defined public conviction which has its only parallel in a mental condition, up to and well into the 18th century, when the then theological interpretation had created a universal belief that all disease was an expression of Divine displeasure or the malice of diabolic influence, and the only remedy, prayer and exorcism.

The influence of quack medicine literature, in playing on the fears of the credulous, and holding out the "only hope," by grotesque falsehoods, have induced a mental condition, analogous to that of the time referred to. In place of diabolic influence, quackery has substituted the "mad-dog" cry of "substitution," and through the efforts of the press this word has come to be the synonym of dis-

honesty, robbery, and of every crime that the depraved can conjure up. The practical interpretation of this is that when a bottle of any of the *life saving specifics* is called for the druggist must hand it out, without comment, and not presume to have a thought or opinion of his own, or if he has he must not express it.

This process makes the druggist a penny-in-the-slot machine without volition, or the right to an intelligent opinion. He must sell "what is called for," even if he knows that the result may be disastrous. This may be made more clear by a few illustrations.

A customer enters a store and asks for a bottle of A's Hair Restorer—the druggist knows, or should know that the nostrum contains about a cent's worth of lead and sulphur, and that the customer is not only being robbed, but is running the risk of lead poisoning, but should he presume to venture any advice, the customer, having been educated in the effulgent light of quack medicine literature and influence, and with the most implicit faith in the miracle hidden away in the few grains of lead and sulphur, through which luxuriant tresses are to cover the bald head, and youth and beauty be restored, would see "substitutor" written in scarlet letters all over the luckless and over conscientious vendor.

(To be Continued.)

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## NEW YORK ACADEMY OF MEDICINE.

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### Section on Orthopaedic Surgery.

Meeting of Nov. 15, 1901.

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GEORGE R. ELLIOTT, M. D., *Chairman.*

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Dr. Homer Gibney read a paper on the "Orthopedic Operations for Intractable Cerebrospinal Lesions," and reported two cases recently operated on in which marked improvement in locomotion was noticed. The two cases reported were Friedreich's ataxia. The incoordination of the lower extremities was in a measure overcome by tenotomies and fasciotomy for correction of the existing pes cavus and trigger toe.

He insisted on first correcting the deformity and then with properly adjusted apparatus worn for a long time—claimed marked benefit and in many cases complete removal of the interference incident to the paralyzes.

Dr. Henry Ling Taylor said he agreed with Dr. Gibney in regard to the great value of operative procedures in properly selected cases of paralytic deformity, particularly in children. While it was true that



operations designed to remove deformity or restore stability to a helpless limb not infrequently resulted in disappointment, owing to imperfect mechanical treatment was often imperfect or unduly prolonged by the failure to grasp the indications for operating.

Dr. John McG. Woodbury said he could not discuss the paper as he came late and did not hear it, but expressed the opinion that chiefly operative procedures held out any possibility of recovery or permanent improvement; non-operative measures alone were simply palliative.

Dr. George R. Elliott said the field referred to was a large one and many a cripple was bed-ridden or going about with contractures and post paralytic deformities that could and ought to be relieved.

He cited as an example a patient upon whom he had recently operated who had been bed-ridden for three years owing to post typhoidal contractures of spinal origin. By proper tenotomies, manipulation and subsequent use of apparatus the girl was now walking quite as well as ever.

Dr. Henry Ling Taylor read a paper entitled: "The effect of osteitis of the knee on the growth of the limb."

From measurements of the femorae, tibiae, feet and patella during or after osteitis of the knee in forty cases where the disease had begun in childhood, the following conclusions were reached.

I. The affected limb, if approximately straight, was longer in the first four years in the large majority of cases. In observed cases of adolescents and adults it was from one to several inches shorter, when the disease had lasted over seven years.

II. The affected femur was nearly always longer in the first four years, and the lengthening of the limb mainly due to lengthening of the femur. In the older cases, after a duration of seven years or more, the femur was markedly shortened.

III. The tibiae were usually equal in length in the early stages; later the tibia of the affected side might be slightly longer for a time, but oftener shorter; the shortening increased considerably in the older cases, and after the subsidence of inflammation.

IV. With limbs of equal length and a duration of several years, the femur of the affected side was found longer and the tibia shorter than its mate.

V. The foot and patella showed a difference in favor of the sound side after one year and frequently before.

VI. The stimulation of growth in the affected femur was accompanied by a retar-

dation in the tibia, foot and other parts; growth in the femur itself was finally retarded. The result after many years was often considerable shortening of the limb.

Dr. T. Halstead Myers said that his observations were almost identical with those given by the reader of the paper. In fifteen cases observed by him the lengthening was generally in the femur, and in some cases the femur lengthened while the tibia shortened, in others both bones were lengthened. This occurred during the active stages of the disease, but he could not speak positively as to the ultimate result. He thought it probable that, if the knee recovered with good motion, there was less shortening, and wished to ask Dr. Taylor whether he noticed that limbs left with stiff joints shortened more than the others. The proper functioning of the joint after the cure of the disease was a most important element in securing the best nutrition and development of the limb.

Dr. H. A. Parish stated that there was no doubt about ultimate shortening in the majority of cases. He cited, however, the case of a girl aet. 16 years, disease of 13 years' duration, remarkable for great lengthening during the active stage of the disease. After a partial excision ten years ago, and recently a supra-condylar osteotomy of the femur, and a cuneiform section of the tibia for the relief of flexion deformity, there existed only  $\frac{3}{4}$  of an inch shortening, with limb at angle of 175 degrees.

Dr. V. P. Gibney said that years ago Dr. Berry had called attention to the subject of the reader's paper, and from examination of fifty cases had found the femur had grown in length. In his own practice he had been disappointed not to find lengthening. While lengthening was generally believed to be the rule, it could be readily understood how shortening might occur from interference with nerve supply by pressure of the head of the tibia on the popliteal space. He referred to a patient seen ten years ago who had  $1\frac{1}{2}$  inches lengthening after a long course of protection treatment. The girl was still young and the joint disease cured; she was allowed to use the limb freely and atrophy set in. At the same time the joint of the healthy limb was protected and after four or five years the normal femur lengthened and the diseased one shortened, so that one-fourth inch difference was the final result.

Dr. Taylor, referring to Dr. Myers' question, said that lengthening of the femur was the rule while the disease was active, and it was probable that more shortening occurred in the deformed and badly managed cases.

In the latter, the final result would usually be considerable shortening in adult life. He referred to the work of Leusden who took measurements of radiograms, and reached conclusions nearly identical with his, except that Leusden had no opportunity to study adult cases where the disease had begun in childhood.

Dr. V. P. Gibney asked Dr. Taylor how he accounted for the shortening in neglected cases. Dr. Taylor replied that he considered it due to retarded growth.

Dr. V. P. Gibney said he was at loss to understand why the bones shortened and would be glad to look over the statistics presented by Dr. Taylor. He supposed Dr. Berry's cases would be called neglected cases.

Dr. Taylor said that his statistics in the majority of instances were not made from neglected cases, though it was probable that most of the adult cases might be called neglected.

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#### Human and Bovine Tuberculosis.

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During the present active discussion on the vexed question of human and bovine tuberculosis, brought about by Koch's recent startling statement, the average practitioner, who from the very beginning of his medical course has had the danger to human beings from the milk and meat of tuberculous cattle drummed into his ears, is apt to feel bewildered and wonder which one of the remaining fundamental principles of his medical training is to go next. Much has been said and written on the subject, but a few more facts and arguments gleaned principally from Hueppe's interesting article on the subject in the *Berliner klinische Wochenschrift* of August 26 may be of interest:—Years ago, before the discovery of the tubercle bacillus, Bollinger succeeded in producing genuine "Perlsucht" in the calf with the aid of human tuberculous products. Not only this, but what is more interesting because of the greater difference, not only in the species of the animals involved, but also in the morphologic characteristics of the varieties of tubercle bacilli employed, Fischel and Hueppe succeeded in culturally so changing mammalian and avian bacilli that the former were successfully inoculated into chickens and the latter into different mammalia. We all know how easily and surely human tubercle bacilli give rise to tuberculosis in, for instance, the guinea-pig and rabbit. And yet, although

confronted with a great array of such pertinent facts and details, all more or less analogous, and by the direct and unequivocal testimony, both clinical and pathologic, of such authorities as Virchow that tuberculosis is transmissible from the cow to the human being, Robert Koch, on the strength of his single series of investigations, has pronounced the words which have shaken the medical world to its very foundations. Again, with reference to the mode of infection by means of tuberculous food products—primary tuberculosis of the intestine is not so rare an affection as is sometimes supposed, especially in children (25%–35% of all fatal tuberculous cases in children), although it is comparatively rare in the adult. We do not, however take into consideration that it is perfectly possible for a primary tuberculous lesion to occur in some portion of the respiratory tract through infection by means of tubercle bacilli brought into the mouth and then lodging either on the tonsils, in carious teeth, or elsewhere, only to be inhaled or mechanically carried downward to the point of least resistance in the larynx or below, as the case may be. The whole question is a grave one, and one deserving of the most earnest thought and careful, accurate observation on the part of every general practitioner as well as by the specialist in pathology and bacteriology. After all, it is the clinician to whom we look for the history and course of the disease, and without his report the pathologist's and bacteriologist's finding is but an incomplete record of the case.—*American Medicine*.

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**ALCOHOLISM AND TUBERCULOSIS.**—At present, and until investigations have more clearly elucidated the matter, we must rest content with the knowledge already gained—that alcohol exerts little or no beneficial influence on the course of tuberculosis, but that on the contrary it tends to predispose to the malady those who consume it to any extent. Indirectly, of course, the fact is undeniable that alcohol is a prominent cause of tuberculosis, by lowering the vitality of its subjects, by inducing poverty and necessitating life in unhealthy surroundings, by causing degeneration of the individual and offspring, and by these means rendering the race more susceptible and prone to infection. Suppression of alcoholism should go hand in hand with that of tuberculosis.—*Medical Record*.

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PORTLAND, MAINE, JANUARY, 1902.

## Editorial.

### Infant Feeding.

We regret exceedingly that we are not able to print Professor Rotch's essay in full or even to give an adequate abstract of it. This subject is of great importance, for the death rate from children's diseases due to improper feeding, especially during the hot months in the large cities, is almost appalling and serves to swell the death rate to a percentage much higher than it should be in a civilized community.

Professor Rotch is well fitted both by ability and experience to speak upon this subject, and largely through his study and experiments real advances have been achieved in this branch of medicine.

While there are still some things in regard to infant feeding of which we know nothing worth the knowing and several more of which we know little, yet in the past few years advancement has been made, and the knowledge thus acquired has stood the test of time and experience.

The problem of infant feeding during July and August in the large cities, is not by any means the easy and simple problem which physicians who practice in country towns would lead us to suppose, neither

does "good cows' milk" offer a satisfactory solution of the question. Though many children in the country in the midst of cool, pure air and favored with natural sanitary surroundings are able to thrive on cows' milk, yet the majority of the city children are unable unaided to digest and assimilate such cows' milk as is obtainable.

Mothers' milk is the ideal food for infants and if every infant could obtain it the infant mortality rate would be much decreased. But every physician knows that by reason of a variety of influences some mothers can not nurse their babies and more mothers will not.

The work that has recently been accomplished by American physicians in the field of placing the feeding of infants on a natural, scientific basis, has commanded the attention and the respect of the medical profession of the world.

Taking mothers' milk as a guide, these workers have determined not only the proportions of its constituent elements but also they have discovered the make up of the different constituents. These are important advances and though we still need much light in this direction the knowledge we have already received has helped us and it also gives us strong hope for the future.

Mainly by the united efforts of physicians, sanitarians and philanthropists, working in the broad field of preventive medicine, the

span of human life has been lengthened and the sum of human happiness increased. But no one can doubt but that a large part of this advance is due to the fact that by improved care and feeding of infants the death-rate among children has been diminished and the number of deaths below the age of ten years decreased.

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#### Child Insurance.

The statistics of certain life insurance companies have long shown that the proportionate death rate among insured children was much larger than among the uninsured. And yet it is rather startling to find the child insurance companies of England and of Canada coming out frankly and insisting that the practice of insuring children under ten years of age should be forbidden by law.

There might be two factors at work to bring about a proportionately high death rate among insured children; first, that parents would be likely to insure a child if it was weak and sickly, and second, that parents would be tempted to neglect children whose death would bring them some insurance.

While neither of these factors speaks well for the moral tone of the community, yet the last is a crime and a disgrace to modern civilization.

And yet the reason urged by the English and Canadian companies for demanding a statute throwing limitations about child-insurance, is the fact that when children are insured for the benefit of parents that they are not reared and tended with that love and care which children have a right to expect of fathers and mothers.

This demand coming from the source it does, and backed by numerous and convincing statistics, should open the eyes of legislators and physicians as to the extent of this abuse and should receive the careful consideration of all anyway interested in children, or at all concerned about the welfare of future generations.

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#### Our Advertisers.

While some journals attract a larger number of patrons and consequently command a larger income, yet we must say we are proud of our advertisers. The list includes the names of firms, companies, and individuals, who by their honesty, ability and enterprise have conferred a real benefit on the medical profession and have been rewarded by their confidence and patronage, and who com-

mand the respect and admiration of both the business and the professional world.

This is no small mead of praise, nor is the praise unworthily bestowed. This is one of the things we all are honorably striving for—to sustain a reputation founded on real merit and on unimpeachable ability and honesty.

We appreciate too that the quality of the patronage we enjoy, the excellence and efficiency of the goods advertised are things complimentary to ourselves. For, surely, we should not receive the patronage year after year of managers of these large laboratories if it were not that we gave them something worth the while in return.

The amount of money, enterprise, and skill represented by our advertisers is a great credit to the science of pharmacology, and as a result it confers a great benefit on the profession and the public. To close as we begun we are proud of our advertisers.

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#### Reviews.

**THE FOUR EPOCHS OF WOMAN'S LIFE.** A Study in Hygiene. By Anna M. Galbraith, M. D., Author of "Hygiene and Physical Culture for Women;" Fellow of the New York Academy of Medicine, etc. With an Introductory Note by John H. Musser, M. D., Professor of Clinical Medicine, University of Pennsylvania. 12mo volume of 200 pages. Philadelphia and London. W. B. Saunders & Company, 1901. Cloth, \$1.25, net.

Women have at last awakened to a sense of the penalties they have paid for their ignorance of those laws of nature which govern their physical being, and to feel keenly the necessity for instruction in the fundamental principles which underlie the epochs of their lives.

This is pre-eminently the day of preventive medicine. The physician who can prevent the origin of disease is a greater benefactor than he who can lessen the mortality or suffering after the disease has occurred. Any contribution, therefore, to the physical, and hence the mental, perfection of woman should be welcomed alike by her own sex, by the thoughtful citizen, by the political economist, and by the hygienist.

In this instructive work are stated, in a modest, pleasing, and conclusive manner, those truths of which every woman should have a thorough knowledge. Written as it is for the laity, the subject is discussed in clear, comprehensible language, readily grasped even by those most unfamiliar with medical subjects. A valuable and commendable feature of this handy volume of instructive information is a comprehensive glossary

of those medical terms necessary to a thorough understanding of the subject under discussion. Without doubt, it is a book that should receive the thoughtful consideration of every woman.

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**SAUNDERS' QUESTION COMPENDS. ESSENTIALS OF PHYSIOLOGY.** Prepared especially for Students of Medicine; and arranged with questions following each chapter. By Sidney P. Budgett, M. D., Professor of Physiology, Medical Department of Washington University, St. Louis. 16mo volume of 233 pages, finely illustrated with many full-page half-tones. Philadelphia and London: W. B. Saunders & Company, 1901. Cloth, \$1.00, net.

This is an entirely new work and a worthy accession to Saunders' excellent series of Question Compendes. It aims to furnish material with which students may lay a broad foundation for later amplification, and to serve as an aid to an intelligent consultation of the more elaborate text-book. The subject of physiology is covered completely, and, the author of the work being a teacher of wide experience, the salient points are particularly emphasized. An important feature is the series of well-selected questions following each chapter, summarizing what has previously been read, and at the same time serving to fix the essential facts in the mind. Nearly all the illustrations are full-page half-tones, and have been selected with especial thought of the student's needs. In every way the work is all that could be desired as a student's aid.

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**MANUAL OF PHYSICAL DIAGNOSIS.** For the use of Students and Physicians. By James Tyson, M. D., Professor of Medicine in the University of Pennsylvania and Physician to the University Hospital; Physician to the Philadelphia Hospital; Fellow of the College of Physicians of Philadelphia; Member of the Association of American Physicians, etc. Fourth edition, revised and enlarged. With colored and other illustrations. Published by P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia, 1901. 12mo. Cloth, \$1.50 net.

Though this is a small book it is nevertheless, and perhaps for that very reason, an important one. That it now appears as a fourth edition proves that it has extended the help which its author intended to give.

By means of clear and concise language, aided by many diagrams and illustrations, this manual presents the essential principles of physical diagnosis. The book as rewritten and revised in its present edition is worthy of the author and of his important subject. We heartily commend it to students, practitioners and to those engaged in life insurance examinations.

Besides the subjects usually considered in a guide to physical diagnosis, this manual

devotes chapters to the examination of the blood; the chemical examination of gastric contents; and tests of the motor functions of the stomach; the X-rays in diagnosis, and the making of an autopsy.

The book is well printed, and attractively bound, and the price makes it available to all.

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**PROGRESSIVE MEDICINE, Vol. VI., 1901.** A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Armory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 400 pages, 13 illustrations. Per annum, in four cloth-bound volumes, \$10.00. Lea Brothers and Co., Philadelphia and New York.

Progressive Medicine is a welcome arrival in the office of many physicians and many will testify to its efficacy in keeping them informed and in touch with recent advances.

The same standard of excellence which has been maintained throughout the series of 1901 is characteristic of the fourth volume. Evidently neither money nor labor has been spared in its preparation.

The subjects especially considered in Vol. IV include: Diseases of the digestive tract and allied organs, the liver, pancreas, and peritoneum by Max Einhorn, M. D.; Genito-urinary diseases by W. T. Belfield, M. D.; Anesthetics, fractures, dislocations, amputations, surgery of the extremities, and orthopedics, by J. C. Bloodgood, M. D.; Diseases of the kidney, by J. R. Bradford, M. D.; Physiology, by A. P. Brubaker, M. D.; Hygiene, by H. B. Baker, M. D.; and a practical therapeutic referendum, by E. Q. Thornton, M. D.

The important subject of anesthesia receives a very full and careful consideration in this volume and some new points are elucidated. The chief of these is the conclusion that in "long operations on patients whose condition makes us especially apprehensive of the dangers of the narcotic, and in operations impossible to perform under local anesthesia alone," the so-called "interrupted ether narcosis" should be employed. The conclusion is reached that the patients suffer no pain and that the danger of shock is not increased. Much space is also devoted to procedure, the indications and the limitations of spinal anesthesia, and the subject of examination of the blood in surgical cases is exhaustively reviewed.

In every department the literature of the subject treated is carefully digested and the decisions are conclusive and the information "up to date."

## Obituary.

Dr. James Robinson Deane, of Newton Highlands, Mass., died Dec. 6th, 1901. Funeral was held at his late residence, No. 9 Forest St., Sunday, Dec. 8th, the Knight Templars taking full charge, he being a member of the Gethsemane Commandery of Newton.

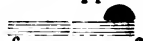
Dr. Deane was born in Palermo, Maine, Oct. 1, 1833. Secured his early education by his own efforts, having taught many high schools before he was 20 years of age. He graduated from Bowdoin Medical College in the class of 1860. He first began the practice of medicine at Lincolnville, Maine, moving from there to Freedom. At this time there being need of surgeons in the navy he at once enlisted, receiving a commission as assistant surgeon. He was stationed in southern waters for over three years, being in charge of a large hospital-ship. During this time yellow fever broke out on board, from which many died. The doctor and captain both contracted this disease. After his return from the war he took up his residence in the city of Portland, Maine, for several years acting as medical director for an insurance company; from there he moved to Newton Highlands, Mass., in 1873, where he resided until his death. He served the city of Newton several years as alderman. During this time he drew many of the Board of Health rules, had much to do with the ordinances relating to the sanitary condition of the city. He was an expert on malaria, many patients coming for miles to consult him on this disease. He was a man of excellent judgment in his profession. Always ready to help out younger men than himself, his firmest friends were among the physicians. He was a member of the Loyal Legion and also a member of the Massachusetts Medical Society. He married Miss Vesta I. Bowler, of Palermo, Maine, she dying of tuberculosis in March, 1876.

F. E. WITHEE, M. D.

## Correspondence.

### A Common Accident with Uncommon Result.

I was called to see H. R., a boy of about fourteen years, on the 28th of June. Two days before, while running, he fell striking on the palm of his right hand. He went home complaining of pain in the right elbow. His mother, thinking it merely a sprain, put on some kind of a liniment and thought he would soon be all right. As the elbow be-

came much swollen and quite painful, I was sent for as I have stated. I found the right elbow much swollen, very red and tender, and movement caused great pain. As I was unable to make out a dislocation or a fracture, I put on a roller bandage, put the arm in a sling, and told him to report again in a few days. Two days later I saw it again. Motion was still very painful and the elbow was still swollen. A week later I examined it again. There was very little improvement excepting that the swelling and tenderness had decreased; but motion was still restricted and painful. Two weeks later I removed the bandage and began easy, passive motion. There was certainly no dislocation and I could not detect any fracture, but he could not touch the shoulder with the hand within six or eight inches, and extension was restricted to about the same degree, and pronation and supination were very limited. As passive motion did not improve the arm I gave the boy ether for the purpose of more satisfactory examination and to break up the adhesion that seemed to be binding the joint. Under ether the arm could be easily flexed and extended, pronated and supinated, and I confidently assured the parents that the arm would soon be all right. Within a week he again came to my office and I found, to my surprise, that the elbow was in just the same condition as before the etherization. I then sent him to a gymnasium and asked the director to see what exercise would do to limber the joint. Exercise and massage made no improvement in it. He was then examined with the X-ray, by another physician, who said there was neither fracture nor dislocation to be seen and advised electricity. Two other doctors were consulted, with no better results. He returned to me again, about one year after the accident, with no improvement of motion in the joint. I had some X-ray pictures taken, in various positions, and in one of these the upper end of the radius appeared to be turned up. Acting upon this hint I gave the boy ether again and cut down upon the upper end of the radius. I found that the head of the radius had been broken off, and had become firmly adherent to the anterior surface of the upper end of that bone as follows:  The union was so firm that the fragment of bone had to be removed with a chisel and mallet. The wound healed by first intention, and the joint is now apparently as good as the other.

This case was interesting to me because the books do not record cases of fracture of the head of the radius except as occurring with complete dislocation of both bones or



from extreme violence. That it was not merely the epiphysis that was torn off can be seen by a glance at the fragment, which I have preserved. D. A. ROBINSON.  
BANGOR, MAINE.

#### High Temperature.

I attended Mrs. W. in confinement, Sept. 26, which was normal in every way, under the usual antiseptic precautions.

The following four days there was nothing unusual in her condition. The fifth day in the evening I was called on account of the patient having slight chills, some pain in the lower abdomen and fever. I found her with a temperature of 104.5 pulse 180.

I immediately gave an intrauterine douche of sterilized water with a dram of carbolic acid to the quart, using two quarts.

There was very little odor to the discharge and but slight abdominal tenderness.

Directly after the douche her temperature was 104 pulse 120. She had taken physic which had operated during the day.

I gave twelve grains of Quinine and went home.

Was recalled in about an hour and found the patient in the worst chill I had ever seen.

The nurse had given whiskey and applied heat. I gave strychnin hypodermically and called Drs. Pepper and Hunnewill in consultation when we gave more strychnin with digitalis. The chill had nearly subsided when they arrived. Her temperature at this time was 108.1 pulse 160. Within two hours it had fallen to 105.6 pulse 140, mind clearer.

In the morning it was normal and continued so for thirty-six hours when it returned and remained from 100 to 104 for ten days, then subsided, the patient making a good recovery. Having had a somewhat similar experience in washing out a pleural cavity with a carbolized solution of the same strength leads me to believe that in some way the irrigation was responsible in a measure for the high temperature.

W. G. SAWYER, M. D.,  
Madison, Me.

The New York Times tells of a New York lady who had a slight cold. She was advised by a faith healer to consult one of the cult, but she declined to accept the suggestion. Later the cold disappeared, but in its place came a bill for \$5 with the information that by absent treatment she had been cured by a healer she had never seen. The bill was ignored, but it was followed by others in quick succession, and finally, from a truly American distaste for a row, it was paid.

#### Selections.

##### \*A Study of the Initial Symptoms in 100 Recent Cases of Smallpox.

By WILLIAM M. WELCH, M. D., of Philadelphia, Physician in Charge of the Municipal Hospital of Philadelphia, and JAY F. SCHAMBERG, M. D., of Philadelphia, Professor of Diseases of the Skin in the Philadelphia Polyclinic; Assistant Attending Physician to the Municipal Hospital.

An important factor in the limitation of the spread of contagious diseases is their detection at the earliest possible moment. The initial stage of variola is characterized by a group of symptoms constituting a syndrome of great diagnostic import. Whilst it would be hazardous to base a diagnosis upon the initial manifestations alone; nevertheless the complex of symptoms is often sufficiently characteristic to excite a suspicion and lead to isolation of the patient and vaccination of exposed individuals, especially when smallpox is prevalent. It should not be forgotten that whilst smallpox is most contagious during the pustular and desiccative stages, the disease may be transmitted even during the invasive period.

After slight malaise the symptoms of smallpox commonly appear suddenly and often with considerable violence. Some patients complain of vague general pains, fatigue and loss of appetite during the latter days of the period of incubation.

The earliest symptom is most frequently a chill. This may be severe enough to be accompanied by chattering of the teeth or it may consist of a succession of creepy sensations scarcely sufficient to attract the patient's attention. Synchronously with the chill or immediately following it the fever appears. The temperature on the first day often rises to 103° or 104° F. and on the second and third day, with perhaps the exception of slight morning remissions, it rises still higher, frequently reaching 105°, and in some cases even 107°. The elevation of temperature is usually sudden; in but few diseases does it rise so quickly from the normal to a high degree. Even in varioloid the early symptoms are not infrequently equally severe, although occasionally they are so mild as to escape attention. But the eruption of unmodified smallpox never appears without being preceded by a well marked invasive stage.

While the fever continues, the skin, of course, is hot and sometimes dry, though more frequently covered by a moderate perspiration. The pulse is full, tense and rapid; its frequency generally corresponds with the temperature curve. In adults it may vary

between 100 and 180 while in children it not infrequently reaches 160. The respirations are almost always increased in frequency, especially when the temperature is excessively high. Prostration is often extreme, being out of all proportion to the length of the illness. Strong and robust patients are frequently unable to stand without support, and when in the upright position soon become pale and liable to be attacked by vertigo or syncope. Thirst is great, the lips and tongue are parched and dry, and there is complete loss of appetite. Constipation is common. The tongue is usually coated with a thick yellowish covering and the breath is heavy and offensive. According to some authors the odor from the body of a patient at this stage of the disease is so peculiar and distinctive as to make it possible for the diagnosis of smallpox to be made by this symptom alone. We must confess that our olfactories have not acquired this degree of acuteness.

Irritability of the stomach is a very frequent manifestation. Occasionally the first symptom noted by the patient is severe and persistent vomiting. In such cases the disease has on more than one occasion been regarded as gastritis. The vomiting often continues for two or three days. It is apt to be accompanied by marked tenderness of the epigastrium. The irritability usually ceases when the eruption appears, and when it continues longer, it should be viewed with some solicitude. Especially in hemorrhagic smallpox is this symptom together with pain in the pit of the stomach, apt to be distressing and prominent. Nausea and gagging are present in some cases, without actual emesis.

Headache is the most prominent among the early nervous symptoms. It usually follows shortly after the chill, but in a certain proportion of cases it precedes it, being not infrequently the earliest evidence of illness. Its intensity varies greatly, corresponding in a measure with the height of the febrile action. At times it is so excruciating as to cause even self-restrained individuals to cry aloud. The face is often flushed, the carotids visibly pulsating. Restlessness and sleeplessness are common symptoms during this stage. When the temperature is high, delirium is prone to supervene. This usually takes the form of talkative incoherence, although some patients become quite violent. Coma is rare except in children. Convulsions are very common among children, more so perhaps in this disease than in any other of the exanthemata.

Pain in the back is a symptom so com-

monly observed that it is believed to be of special diagnostic value. It is not as constant as some of the other symptoms, yet it occurs in more than one-half of the cases. In perhaps one-third of the cases it is sufficiently severe to cause the patient to volunteer information concerning it. Its diagnostic import, therefore, is due rather to its infrequency in the other acute infectious diseases, than to its constancy in smallpox. The lumbar and sacral regions are the parts to which the pain is usually referred, although it may extend to the dorsal region. As a rule it is more severe in unmodified smallpox than in varioloid, yet this rule is subject to many exceptions. In hemorrhagic cases the pain is often of an excruciating violence. Lumbar pain is more constantly seen among female than male patients, owing to the fact that the menstrual function is very liable to be excited by the initial illness of smallpox, causing the menses to appear out of their regular period. Pregnant women are exceedingly liable to suffer from abortion or premature delivery. The pain in the back owing to these causes is given greater prominence, therefore, in women.

General aches and pains are frequently complained of, appearing at the same time as the headache and backache. These may occur anywhere, but are usually referred to the lower extremities, particularly about the knees. The soreness of the general muscular system may lead to confusion of diagnosis with "la grippe." Vertigo, which is particularly manifest upon the patients assuming the erect position, is a common early symptom. It is often well marked in mild cases, for these patients are more apt to rise from their beds. Syncopal attacks may occur in weak individuals.

Peculiar prodromal rashes often make their appearance during the initial illness. Where they develop it is usually upon the second day of the invasive fever. They disappear ordinarily in from 24 to 48 hours. The frequency of these rashes appears to vary in different epidemics. During the wide-spread and malignant epidemics of 1871-1872 they were very common. We have observed quite a few of these eruptions during the past months, although they are apt to fade before the patients are received at the hospital. The most common type is that resembling measles, with which disease, indeed, it is liable to be confounded. The eruption has a rather irregular distribution, being at times generalized and at other times limited to certain regions of the body. It moreover differs from the eruption of measles in that the rash is not elevated above the level of

the skin and therefore scarcely appreciable to the finger passed over it. Its ephemeral character is also a differentiating feature. This roseola variolosa, as it has been designated, has a close analogue in the roseola vaccinosa which occasionally appears about eight or ten days after vaccination. The scarlatiniform type is, in our experience, rather less common than the morbilliform eruption. It, too, is inconstant in its distribution and extent, and equally evanescent. A third form of prodromal rash is the purpuric of hemorrhagic variety. This consists of closely aggregated, pin point to pin head sized petechiae which are in such close juxtaposition as to produce the impression of a diffuse redness. This type has a predilection for the lower portion of the abdomen, the groins, the inner aspects of the thighs and occasionally the axillae and lateral surfaces of the chest. These eruptions are of diagnostic importance, for in association with classic initial symptoms, they afford strong presumptive evidence of smallpox. Prodromal rashes are more common in cases of varioloid than in unmodified smallpox.

One hundred patients recently admitted to the Municipal Hospital were closely interrogated as to the character of their initial symptoms. There was no attempt at selection of any particular type of smallpox. The number includes 28 cases of confluent smallpox, 15 patients with very profuse and semi-confluent eruptions, 29 eruptions of moderate severity, and 29 cases of mild varioloid. Of this series of 100 patients twenty-two died. Headache was the most constant of the initial symptoms. The various symptoms were present in the following percentages: Headache 86 per cent.; chills or chilliness 78 per cent.; backache 70 per cent.; vertigo 57 per cent.; vomiting, 55 per cent., with nausea in ten per cent. more of cases.

In some of these cases the symptoms were of marked severity, whilst in others they were extremely mild. An effort was made to determine the earliest symptom observed by the various patients. It is recognized that some inaccuracy must arise from an attempt to chronologically arrange the symptoms from the histories given by the patients.

Chills were the first symptoms in 85 cases. Headache was the first symptom in 26 cases.

Backache was the first symptom in 16 cases.

Vomiting was the first symptom in 9 cases. General aches and pains were the first symptom in 7 cases.

Vertigo was the first symptom in 2 cases. In but two patients out of the hundred

was there complete absence of initial illness. These occurred in a man 26 years, with a very mild varioloid, and in a colored woman aged 27, with an eruption of moderate severity. Upon close inquiry this patient admitted merely experiencing fatigue upon the day preceding the eruption. It is possible that some negative histories of this character may be due to poor memory and poor powers of observation on the part of the patient.

In the severe cases the initial illness was always well marked, although the classic symptoms were not invariably present. A man of 55 years who had a fatal confluent attack had merely as prodromes a severe chill, fever and prostration: headache, backache, vertigo and vomiting were absent. A male patient, 29 years of age, with an eruption of moderate severity, experienced during the initial stage, fever, repeated vomiting and pain in the stomach, the other symptoms being absent. On the other hand quite a number of patients with very mild eruptions gave a perfect history of the initial classic syndrome. A young woman of twenty years, for instance, with only three or four lesions on the face and a few upon the arms and hands, experienced at the outset of the disease headache, backache, repeated vomiting, severe chills, vertigo and aching in the legs.

The duration of the initial stage of smallpox is commonly 48 to 72 hours. It is rarely less, but it may be somewhat prolonged. Some text-books state that the temperature falls upon the appearance of the eruption: This statement requires qualification being true only in a general way. In our experience in unmodified smallpox there is usually no decided remission in the fever until the second or third, and sometimes not until the fourth day of the eruption.

In conclusion we desire to call attention to the fact that in a large percentage of the cases of smallpox admitted to the Hospital during this year, the initial symptoms were interpreted by the physicians previously in attendance as the early manifestations of typhoid fever.—*Phil. Med. Jour.*

#### \*Bone and Ivory Fasteners in the Treatment of Fractures.

Surgeons have, during the past few years, experimented with a number of appliances made of different substances, in their efforts to find the best material for maintaining apposition of the fragments of a broken bone. Two kinds of material have been used, absorbable and nonabsorbable, of which the

latter has the advantages of cheapness and strength, but also the more than counterbalancing disadvantage expressed by the adjective nonabsorbable. Of absorbable materials, practically only two need be considered—bone and ivory—both these substances having been used in a variety of forms, such as collars, nails and splints. Numbers of good results have been reported by different observers. The preparation of a bone or ivory collar or nail is not a difficult matter, nor is its sterilization; and it may be further noted that the tibia and the femur of the ox lend themselves very satisfactorily to the formation of such objects.

The most important points in this subject are the class of cases suitable and the results obtained compared with the results of other methods. It is clear that there is a large class of fractures to which open operative measures will never have to be applied, but there are still many cases in which it is difficult or impossible to obtain reduction without direct access to the site of fracture, and to maintain it without some mechanical aid applied directly to the fragments. Some fractures of the femur belong in this class, especially when there is much obliquity of the line of fracture, and indeed we may encounter the same difficulty in any of the long bones, if only the break is oblique enough. We may, therefore, say that, in cases in which ordinary means of reduction fail, we must consider the advisability of making an incision and thus reaching the seat of the difficulty. In compound fractures it will apparently often be advisable to undertake to fasten the fragments with bone or ivory plates or nails, since such measures seem to assist in preventing failure to unite, and the formation of a pseudarthrosis, unfortunately common enough after compound fractures. The general rule may therefore be laid down that in fractures, either simple or compound, when reduction is impossible by ordinary means, we must consider the application of bone or ivory supports in the shape of collars, nails or screws to maintain the ends of the bones in proper relation.

In considering the results after such procedures, we must make allowances for the kind of fracture and also apparently for the material used, in which connection we may say that the day of nonabsorbable material is probably past. In a number of instances an ivory plug has been inserted into the medullary cavity of a long bone at the point of fracture, and the broken ends thus supported. There is no necessity for introducing such a large mass of ivory into the tissues, and so taxing their powers of absorption unnecessa-

rily. A perforated hollow cylinder serves the purpose much better and is comparatively easily absorbed. It may be remembered that the ivory or bone appliance needs only strength enough to support the bone; the dressing supports the rest of the limb. Ivory or bone nails or screws, in suitable cases, are probably the best forms to employ, and it will, as a rule, not often be necessary to make use of the larger collar or intramedullary cylinder. In a number of instances in which suppuration has occurred and ivory nails have come out after a number of weeks, these have been found to be eroded to a remarkable degree. This condition was at first attributed to the corroding action of pus, but this view is erroneous. The corrosions represent the efforts of nature to absorb the offending foreign material, and, if too much is not required of natural processes, the whole object can be removed in the same way. The introduction of these appliances represents an advance in the treatment of certain of the more difficult fractures, and, with proper precautions, there is no danger in their use. We should say that, as a rule, it would be better to make the collars, plates, and similar articles from the bones of the ox, and the nails and screws from ivory, and it might be added that all these things should be as small as is consistent with safety. Another fact which may be mentioned is that the driving of nails into living bone causes an increase in its growth, a fact which has proved useful in the treatment of some refractory cases of delayed union.—*The Medical Record*.

#### The Pathology of Burns.

Extensive burns of the surface of the body have a practical interest and have been the subject of much theoretical and experimental work. But in spite of extensive investigation there is still no unanimity of opinion as to the exact mode of death in many of these cases. The initial shock, broncho-pneumonia, secondary sepsis and hemorrhage from ulcer of the duodenum explain the fatal termination in some instances. Yet there still is lacking a clear understanding of the pathologic processes involved in many of these mysterious cases.

F. A. Hoffman<sup>1</sup> calls attention to the fact that while there has been much experiment and hypothesis concerning this subject there is still a remarkable lack of that which is the true groundwork of the whole matter, viz., a

<sup>1</sup> Constitutional Diseases.

<sup>2</sup> Mittheilungen aus den Grenzgebieten der Medizin und Chirurgie. Band viii, Hefte 4 and 5.

collection of good clinical histories and records of complete autopsies. With these thoughts in mind, M. Wilms,<sup>2</sup> of the surgical clinic of Leipzig, has worked on this subject largely from the clinical standpoint, and while his conclusions are not beyond criticism, as he himself admits, his work deserves more than passing notice, if for no other reason, because he proposes a simple therapeutic measure which he believes is of great value.

Wilms dismisses most of the theories already advanced to explain the phenomena of burns as wholly unsatisfactory. The nervous and reflex theory of Sonnenburg has no clinical support from an examination of blood pressure and vasomotor disturbances. Nor do clinical observations bear out the theory of wholesale destruction of red blood corpuscles. The hemoglobin quickly disappears from the urine and blood counts often show more than the normal number of erythrocytes to the cubic millimeter. Nor does he find confirmation of the theory that the remaining corpuscles are so injured as to be unable to perform their functions, or that the liver, spleen and kidney are seriously damaged by the destroyed or altered blood corpuscles. The kidneys may be incompetent, not so much through the absolute increase in the hemoglobin that mechanically obstructs them as through the poverty of the blood in plasma, a large amount being lost through the burned skin. In this way the kidneys are not flushed as they should be. Relative anuria may thus result. A nephritis may occur preceded, and followed, by an albumosuria. The albumose Wilms thinks is the cause of the nephritis with its albumin and casts. The lessened coagulability of the blood and the failure to find numerous thromboses make him question the theory that the blood-plates in cases of burns are greatly increased in number and lead to multiple thromboses.

As stated above, the loss of water, or rather plasma, from the blood is considerable where burns are extensive and not too deep. Of this the formation of blisters and the quickly soaked dressings give ample proof; and Wilms has by measurement of water ingested and water eliminated by the kidneys, shown that this loss of plasma is greater than one would suppose, greater even than in cholera, as Tappeiner<sup>3</sup> showed in 1881. The small amount of plasma in the vessels accounts for the relative richness of the blood in corpuscles and for the anuria. The blood, in a word, is concentrated. In

order to avoid this condition as much as possible Wilms has given huge quantities of water, tea, coffee or light beer to his patients and, as he believes, with good results. The concentration of the blood is lessened, the kidneys are flushed and mechanical obstruction diminished, and with the increased amount of urine toxic substances are more rapidly eliminated.

That toxic substances may result from extensive burns and that their presence in the circulating blood may produce a deleterious effect has been often referred to by other writers. Wilms, from the finding of albumose in the urine, believes the toxic substance is a product of the destructive splitting up of albumin in the tissues in the immediate neighborhood of the burn, that this toxic material accounts for the fever, the pulse changes, the vomiting, the collapse, the nephritis. It is eliminated as albumose, though what preceding chemical changes take place is uncertain. This toxemia is found especially in burns of the third degree, where the skin is charred and leathery and exudation on the surface does not take place. In these two conditions of the blood—its poverty in plasma, and its richness in toxic material—Wilms sees an explanation, or at least a partial explanation, of the phenomena of burns. His work is suggestive and should lead to more careful clinical observation, including examinations of the urine and of the blood. His treatment—the administration of large amounts of water by the mouth, rectum and under the skin—is harmless and appeals to one as having a rational basis.—*Jour. A. M. A.*

#### Ohio Society for Prevention of Tuberculosis.

Our news columns contain the announcement of the formation in Ohio of a state society for the prevention of tuberculosis. This is an encouraging sign. While health boards, medical societies and individual members of the medical profession have done much to limit the propagation of tuberculosis, such a society as this one in Ohio will be a big help in the work, from the fact that laymen of large political influence have been induced to take active part by assuming some of the important offices. The society is to be congratulated for having secured the co-operation of these gentlemen, not only because by this means the public at large will become interested, but also because to carry on the work of the society considerable money will be needed, which a purely medical society would not be able to obtain, working

<sup>2</sup> *Gaz. degli Ospedali (Milan)* 1900, xxi, 599.

<sup>3</sup> Tappeiner: *Centralbl. f. d. Med. Wissensch.*, 1881, Nos. 21 and 22.

alone. So far as formulated, the plans of the society include the establishment of a state hospital for consumptives in whom there is a chance of cure, and the isolation so far as possible of incurable cases in smaller hospitals in different parts of the state. If the plan can be carried out the greatest good can be accomplished. It is to be hoped that this action in Ohio will be followed by similar action in other states.—*Jour. A. M. A.*

#### NOTES ON THE TREATMENT OF COUGH.

By HENRY HERMAN, M. D., New York.

Most practitioners will readily agree that the old remedies which we have had at our disposal for the alleviation of cough are not everything that can be desired. The old time-tried narcotics and expectorants often fail us when most needed, and it is especially in chronic cases, in which cough constitutes the chief discomfort of the patient, that they fail most frequently. In paroxysmal coughs, especially in whooping cough, there has always been a difficulty in soothing the irritable mucosa of the bronchi and in reducing the number of attacks, so as to avoid the weakening effects of the paroxysms, without, at the same time, drugging the patient with narcotics until the danger line of depression has been reached.

Notwithstanding the evident need for better respiratory sedatives, the chemists have given us a large number of remedies for the reduction of fever, and an innumerable number of substances vaunted as antiseptics, but have paid little or no attention to the preparation of new therapeutic agents designed to alleviate cough. Eager anticipation, therefore, greeted the discovery of the clinical value of heroin, the diacetic acid ester of morphine, by Dreser and Floret, in 1898.

Heroin has now been tested in so large a number of cases, reported by so great a number of trustworthy observers, that its status may be accepted as securely established. The sum of clinical and pharmacological experience designates heroin as a respiratory sedative superior in every respect to the older narcotics, and withal devoid of toxic or depressant properties. Its physiological action consists in a diminution of the frequency of respiratory movements, and, at the same time, in an increase of the volume of the individual respiratory act. The reduction of the tussal reflexes is combined with the relief of pain without the danger of a drug habit, which exists when other opiates are prescribed.

As regards after-effects, we may, I think, accept the conclusion of Manges (*New York Medical Journal*, January 13 and 20, 1900), based upon a review of the work of numerous writers on the subject, that heroin is not followed by serious effects of an untoward character unless it be administered in excessive doses. My own observations, in a large number of cases, confirm this view. The only collateral effect that I noted in the use of heroin was a tendency to constipation, which is especially prominent in old persons, but is in all cases easily combated with mild laxatives. I have not observed vertigo, nor vomiting, after the administration of doses proportionate to age. There is no doubt, however, that, after all, heroin is a derivative of morphine, and therefore is to be used with that caution and judgment which drugs of this class demand. Fortunately its very efficiency precludes the necessity of administering doses of any magnitude beyond the usual.

Next to the respiratory sedatives, the expectorants are the most essential factors in the treatment of cough. The members of the ammonium group for a long time have enjoyed well-merited preference as stimulating expectorants on the part of physicians. I wish, however, to call attention to one member of the ammonium family that has been most inexcusably neglected—ammonium hypophosphite. Its action is similar to that of ammonium chloride, but it has the advantage of being easily borne by the stomach, and of being more agreeable in taste. I was surprised to find that such a complete work as the National Dispensatory does not mention it, and it has not been received into the Pharmacopœia of this country nor into those of Germany, Great Britain and France. The dose is from ten to thirty grains, and the salt occurs as a white laminous crystalline powder, soluble in water, having the chemical formula of  $\text{NH}_4\text{PH}_2\text{O}_7 + \text{H}_2\text{O}$ .

There can be no question as to the increased value of a combination of remedies which embodies so efficient a respiratory sedative as heroin and so trustworthy an expectorant as ammonium hypophosphite, and therefore I determined to try the preparation known as glyco-heroin in the treatment of coughs, with special reference to paroxysmal coughs and chronic, obstinate bronchial catarrhs. In the following very brief histories I have endeavored to give the results of my experience with this preparation, which, in addition to 1-16 of a grain of heroin hydrochloride to the drachm and ammonium hypophosphite, contains balsam of tolu and white pine bark.



The following cases are taken somewhat at random from my notebooks:

CLINICAL HISTORIES.

1.—D. G., aged 7 years. Whooping cough of three weeks' duration. Vomiting with each paroxysm. As many as eighteen paroxysms in twenty-four hours. Thirty drops of glyco-heroin three times daily. After two days the paroxysms had diminished in severity and frequency, and there were no more than five or six paroxysms daily. After four days the vomiting ceased, and the patient began to sleep soundly. The child felt better in every way and was able to play and romp about without producing a coughing spell. Ten days after glyco-heroin was first given, the patient had but two or three paroxysms daily, and these were of a mild type. This state of things continued for about ten days longer, when only a slight cough remained. At the end of two weeks the patient was perfectly well.

2.—L. G., aged 12 years. Sister of the above mentioned patient and was seen at the same time. Whooping cough of a more severe type than that in the preceding case. Forty drops of glyco-heroin (equivalent to 1.24 grain of heroin hydrochloride) three times daily. Similar course as the preceding case.

3.—M. C., aged 21 years. Whooping cough of one week's duration when first seen, the chief complaint being troublesome paroxysms at night. A teaspoonful of glyco-heroin was ordered to be taken four times a day. Within forty-eight hours the patient reported marked improvement. Within one week the cough ceased to trouble him and he considered himself perfectly well.

4.—G. V., aged 38 years. Whooping cough of twelve days' duration. A mild type of the disease. Glyco-heroin was prescribed, but proved to be of no service whatever, although the patient took a teaspoonful every four hours for ten days. A change of climate was advised, and the patient spent two weeks at Atlantic City; had the desired effect.

5.—F. F., aged 2½ years. A severe attack of whooping cough, associated with acute bronchitis. After the administration of glyco-heroin, ten drops three times daily for one week, the little patient was well on the road to recovery. After twenty-five days from the beginning of the cough the patient was perfectly well. In this case there was constipation, which may have been due to the heroin.

6.—F. H., aged 5 years. Was seen after having been under treatment for three weeks,

and after she had been taking bromides, belladonna and other sedatives without any results. The cough was markedly worse at night, and the child was restless and peevish from loss of sleep. Ordered fifteen drops of glyco-heroin three times daily. After forty-eight hours there was no improvement, and the dose was increased to twenty drops every four hours. At the end of three days, the writer was surprised at the marked improvement which had taken place. The child coughed only once in twenty-four hours, and slept well at night. At the end of twelve days she was discharged cured.

7.—H. H., aged 8 years. Brother of the above mentioned patient. The same condition and the same result, but glyco-heroin had to be pushed to sixty drops three times a day.

8.—I. A., aged —. Bronchitis of two weeks' standing. Various expectorants and sedatives had been used without any results. A teaspoonful of glyco-heroin given every four hours. In three days the patient reported well.

9.—S. O., aged —. Cough of pregnancy. The usual remedies had been tried without avail. Glyco-heroin every four hours, in teaspoonful doses. In forty-eight hours a most marked improvement was noted.

10.—A. T., aged 23 years. Cough of pregnancy. Very troublesome. After the ordinary remedies had failed, glyco-heroin succeeded in relieving the cough in a short time. A teaspoonful was given three times daily.

11.—S. H., aged 23 years. Bronchitis. Glyco-heroin, a teaspoonful every four hours. Excellent results after the second day.

12.—M. S., aged 21 years. Acute bronchitis. Glyco-heroin, in teaspoonful doses, three times daily. Excellent results after two days.

13.—P. O., aged 27 years. Winter cough; very troublesome. The patient gives a history of recurrence every winter. The cough was paroxysmal in character, and he has taken a great variety of remedies. Glyco-heroin was given in teaspoonful doses, every four hours, and three days later great relief was experienced. The patient was then told to take the preparation twice daily, morning and evening, until the cough disappeared.

14.—W. L., aged 5 years. Whooping cough of marked severity. Twenty drops of glyco-heroin were given three times a day, with results similar to those obtained in the other cases of whooping cough.

15.—S. W., aged 78 years. Winter cough. The writer has had this patient un-

der treatment for cough every winter for fifteen years. Glyco-heroin showed the best results, as compared to all other remedies previously used. In fact, while taking it, the patient has no cough.

16.—W. W., aged 73 years. History and results similar to those obtained in the previous case.

17.—M. C., aged 81 years. History similar to that of case 15, but no results were obtained from the use of any remedy.

18.—M. B., aged 7 years. Whooping cough of two weeks' duration. Although glyco-heroin was used in doses of forty drops three times daily, no results were noted after two weeks' treatment.

19.—S. M., aged 7 years. Whooping cough of three weeks' duration. Relieved after six days' treatment with glyco-heroin, in doses of thirty drops every four hours.

Of the nineteen cases reported, there were ten cases of whooping cough in patients ranging from 2½ to 38 years of age. In these the dose varied, according to age, from ten drops to a teaspoonful, the intervals not exceeding four hours. The results were very satisfactory in all cases, with the single exception of case 4, a mild type of whooping cough in a patient aged 38 years, in whom nothing but a change of climate had the desired effect. In the other nine cases of pertussis, there was very prompt diminution of the number and severity of the paroxysms and an improvement in the general well-being of the patient. These effects were all the more noteworthy as they are rarely seen in pertussis on the administration of any other sedative remedy.

In the three cases of subacute bronchitis, the results were so prompt as to astonish the patients themselves. With due care the continuation of the catarrhal process into a chronic state was avoided.

In the two cases of cough, occurring during pregnancy, glyco-heroin proved very efficient. Of all forms of cough, sedatives are most urgently indicated in the irritable condition of the whole system which obtains in the pregnant state. In glyco-heroin I found a palatable combination, which, at the same time, is free from the depressant properties of the other opiates.

There were four cases of chronic bronchitis, the age of the patients ranging between 27 and 81 years. As has been noted by other writers, heroin is not so well borne by the aged as it is by the young. The dose must therefore be kept down in old people, and it is for this reason that in one of the cases, No. 17, in which the patient was 81

years old, no results could be obtained. In contrast to this case stand the other two instances of chronic bronchitis in the aged (persons aged 73 and 78 years respectively), in which the effect was all that could have been wished.

In conclusion, I will say that while there probably never will be a remedy which will act with equal efficiency in all cases, the results which I obtained with glyco-heroin in a number of difficult and obstinate cases of cough enable me to express myself as fully satisfied that it is an efficient respiratory sedative and expectorant.—*The Denver Medical Times*.

#### The Treatment of Syphilis, with Special Reference to the Best Methods of Administering Mercury.\*

By WINFELD AYRES, M. D., Genito-Urinary Surgeon, Bellevue Hospital, O. D. P., New York; Instructor in Genito-Urinary Diseases in New York University and Bellevue Hospital Medical College; Instructor in Genito-Urinary Diseases in the New York Post-Graduate Hospital, etc.

The author calls to mind the facts that mercury has been used in the treatment of syphilis for over 400 years, and there are few physicians, today, who do not use it in some form. Although the method of treatment with mercury is still discussed, he is firmly of the opinion that there is no hope of eradicating the disease unless the full dose is given constantly for something like three years. The treatment should begin just as soon as the diagnosis can be made. There is no ground for supposing that enucleation of the chancre has the effect of aborting the disease. If a positive diagnosis cannot be made from the appearance of the initial lesion, general tonic treatment should be instituted.

In some cases the protiodide controls the symptoms, but in the majority it is of very little use. Experiments with Mercuriol were conducted at Bellevue Hospital, for eight and a half months, with 180 cases; the histories of 95 of these are recorded. The remainder could not be kept under observation and are therefore passed over. The dosage of the Mercuriol, regulated either by reaching the point of tolerance or control of the disease, varied from one-half to six grains. In 64 of the 95 cases the disease was controlled as follows: in two weeks, 8; three weeks, 12; four weeks, 14; five weeks, 6; six weeks, 5; seven weeks, 2; two months, 8; ten weeks, 2; three months, 5; and

\*Abstract of an original paper by the author in *The Lancet*, (London, Eng.) October 19, 1901.

four months, 1. The remainder are marked thus: decidedly improved, 17; improved, 8; no improvement in two weeks, 3; no improvement in four weeks, 1; and no improvement in three months, 2. The latter were all dispensary patients and it is uncertain whether they took their medicine regularly.

The writer states that his plan was to increase the dose steadily from one grain until the symptoms were controlled, or until there was a slight tendency on the part of the teeth and gums to become tender. If the symptoms were not controlled before the physiological effect of the Mercuriol made itself felt, small doses of potassium iodide were added, and in every case where the Mercuriol was taken according to directions, with the exceptions noted above, the symptoms were controlled.

In 67 out of the 95 cases tabulated, no other medicine than Mercuriol was given. In 15 out of the remaining 28, the addition of iodide of potassium was found to be sufficient to control the disease, while in 6 others the addition of an iron tonic sufficed for this purpose.

The cases are not reported at length, but a few of the more remarkable results and some cases in which other medicines failed to control the disease are briefly mentioned.

Case 1 had been taking bichloride for one month with very little improvement. Under Mercuriol, three grains maximum dosage, the symptoms were under control in five weeks.

Case 2 had been under biniodide of mercury (one-sixteenth of a grain) and potassium iodide (five grains,) which caused iodism. His symptoms were controlled in one month under half a grain of Mercuriol.

In Case 3 unguentum hydrargyri had failed to control the disease. The patient was put on Mercuriol and the dosage pushed up to six grains three times a day. The disease was thoroughly under control in seven weeks.

Case 4 had been on three-eighths of a grain of biniodide of mercury and twenty grains of potassium iodide for two months. The medicine caused nausea and vomiting. Having been put on Mercuriol and the dosage gradually increased to five grains three times a day the symptoms were controlled in three weeks.

Case 5 had been taking hydrargyrum bichloride (one-twelfth of a grain) three times a day, under which an eruption on his face had faded, but the eruption on his body still persisted. His symptoms disappeared in two weeks under a maximum dose of three grains of Mercuriol three times a day.

Case 6 had been on bichloride of mercury (three-sixteenths of a grain) for three months, in spite of which he had palmar syphilide of an eczematous variety. All appearance of the disease disappeared after he had been one month on Mercuriol, his maximum dose being three grains three times a day.

Case 7 had been taking one-quarter of a grain of Mercuriol and fifteen grains of potassium iodide, with the result that the eruption had decidedly improved, though not to the extent that it should have done. There were thickened red patches on the face, covered with scaly eruptions. The symptoms almost entirely disappeared within three weeks under a maximum dosage of five grains of Mercuriol three times a day and fifteen grains of potassium iodide.

Case 8 had been treated with inunctions of mercury, under which the eruptions disappeared, but the pains in the bones still persisted. He was relieved in three weeks under a maximum dosage of four grains of Mercuriol three times a day.

Case 9 had been taking other forms of mercury for six months. The form which had done him most good was bichloride. Yet one-fifth of a grain did not entirely control the disease. He had been taking that for two months when he was placed on Mercuriol. The dosage in his case was pushed up to six grains three times a day, and at the end of seven weeks all his symptoms had disappeared.

Case 10 had been taking medicine off and on for two years, but his symptoms never disappeared entirely. After being two weeks on Mercuriol (two grains three times a day) with the addition of potassium iodide, all symptoms had disappeared.

Ayres, in conclusion, states that he uses Mercuriol in his private practice to the exclusion of all other drugs. His experience is that he gets better results. He has found no form in which mercury can be given with such good results as in that of Mercuriol.

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ECONOMIC VALUATION OF VISION.—The authors (Würdemann and Mangus) show that the loss of one eye, for the worker whose trade has higher visual demands, entails a loss of 30% of his earning ability for the first year after the accident, and 20% afterward. For the lower class of trades the loss is 27 and 18%. Other factors of visual loss are fully considered. The prospective loss in wage earning in the individual case may be readily calculated. They figure with the compensation the individual has

been getting and his prospective future earnings, which depend upon his age, business and state of his visual functions. Similar propositions are involved in these calculation as are so successfully used by such immense interests as the modern insurance companies in their estimations of probabilities, the results being not the exact amount that a man will earn, but what he might reasonably expect. This probable pecuniary or economic damage should be the basis for settlement of claims for damage, of course modified by the legal circumstances involved in the individual case.—*Jour. Am. Med. Asso.*

The latest new brand of religion is founded on a book called *Oahspe*, written by an angel on a typewriter. The title rather looks as if the typewriter might have been temporarily out of kilter.

#### American Support of Parisian Vice.

According to the *Springfield Republican*, the pastor of one of the French Protestant churches in Paris charges the American visitors with being a cause of obscenity and debauchery in the French capital during the summer months. He bases his charge on the statements of vendors of lewd photographs and ribald papers and cards, who declare that Americans are their most profitable customers. The *Republican* also refers to a recently printed letter from Congressman Frederick H. Gillet, expressing indignation that thousands of American tourists, jealous of their reputations when at home, make Paris more hideous by their patronage of Parisian vice. Senator Beranger, President of the Paris Society for the Prevention of License in the Streets, states that the sale of obscene prints is always enormously increased during the summer, arguing that this shows that it is not a normal characteristic of the city, but is owing to the desire to meet the foreigners' conception of the gay capital. Thousands of visitors come to Paris declaring in loud terms their intention to have a "good time," that the city accordingly takes on a special aspect for them. If Paris is to grow better in this respect, foreign visitors must cooperate. Americans will justly resent the charge that they are more conspicuous as patrons of Parisian vice than travelers from other countries, yet the fact that in the summer months American tourists outnumber those from any other nationality naturally gives them a certain prominence in the eyes of the French. The general effect is harmful both

to Paris and to America. Many tourists bring home new ideas of vice, which tend to corrupt the moral standards of the people, and not a few bring back diseased bodies. Again, these tourists give to the American people as a whole a reputation in Europe which is highly uncomplimentary, for it is undoubtedly true that European ideas of Americans are formed largely from the particular Americans whom they see. What is true of Paris also applies, though with much less force, to the corruption in other European cities.

Although American tourists undoubtedly do contribute to the obscenity and orgies of European cities, we deny that they are the chief supporters. Without the existence of a high degree of depravity in a degenerate people such exhibitions would be impossible. Physicians, large numbers of whom are always either abroad as tourists or students, should remember Europe has much that is really worth seeing, while the indulgence of any morbid desire to see the depraved side of life may bring discredit on the American profession in particular, as well as on the nation in general.—*American Medicine.*

#### Lessons to be Learnt from Vegetable Pathology.

Jonathan Hutchinson, after a general comparison between disease processes as affecting the vegetable and animal kingdoms, counsels caution in the inferences which we draw, based upon an incomplete examination of facts, in reference to the different species of fungi which attack the human skin. There are a number of these fungi. One of them produces pityriasis versicolor; another causes true favus; another causes ringworm, and it is suggested that there are two or three kinds of ringworm. He would hint that we should be a little cautious in believing that these diseases are not transmutable. His belief is that from the fungus of common ringworm of the scalp you can produce tinea versicolor, the common chloasma of the chest of an adult. He has seen many instances in which young nurses attending children the subjects of ringworm, have developed not ringworm, but tinea versicolor on the chest. He therefore suggests that we should be a little cautious in inferring, because the external appearances produced by the disease which we know as tinea versicolor, are different from those which we know as ringworm, and are diagnosable easily from each other, that the two things

are not transmutable. After all, it may be a modification of the fungous growth, and it may be the same fungus which produces the two. His belief is that it is, and that the large fungus ringworm and the small fungus ringworm are very likely the same; and that the fungus which produces favus, which is very much less common, is only a very modified form of that which produces ordinary ringworm.—*The Lancet*.

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### Hyperæsthesia.

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Perhaps it would have been better to give another title to this consideration and take up hyperæsthesia in whatever part of the body we may find it. This, however, would only tend to lengthen out the subject, and the condition wherever found is practically the same pathological entity.

Hyperæsthesia is due to derangement of the nerve nutrition. Romberg, the great neurologist, declared that neuralgia was the cry of the nerve for better blood. This was an accurate description of the causes which led to the establishment of neuralgia. We may say that hyperæsthesia is due to either permanent or transient interference with the nutrition of the nerve supply of the organ which is formed to be hyperæsthetic.

Usually, however, the causes are transient—except in those cases where a cancer, tumor, or exostosis so interferes with the blood supply that the part is constantly without adequate nourishment.

The treatment of these cases is manifestly to correct the order of things so that the circulation may be corrected, and the nervous tensions may be lessened. If there is a tumor, exostosis or other condition of a like nature present it of course must be treated in the proper manner. If surgical means are called for they must be brought to bear on the condition in full time so that our patient's powers of vital resistance are not wasted.

If there is constitutional disease associated with the hyperæsthesia it must be treated on purely rational grounds—bringing the best measures to bear to eliminate it.

The best general remedy for all types of hyperæsthesia, and nerve disorders is Daniel's Conc. Tinct. *Passiflora Incarnata*. This remedy is a sedative, antispasmodic, soporific, and anodyne, and it can be counted on to bring us favorable results when it is given long enough and freely enough to give the patient a chance to properly come under its influence. This remedy besides its power to act as already stated, is a mild laxative and

diuretic also. These qualities add greatly to the virtue of the remedy. We may also add that Daniel's Conc. Tinct. *Passiflora Incarnata* is entirely non-toxic, and can be given for a long period of time without establishing drug addiction.

In all types of hyperæsthesia it can be administered with the feeling that it will work benefit because it relieves the hyperæsthetic condition, soothes the patient and induces sleep which of course adds great strength to the system and puts the patient in a plane of recovery.

As soon as consulted it is best to have the patient take one or two teaspoonfuls of Daniel's Conc. Tinct. *Passiflora Incarnata*, this repeated every two to four hours according to the severity of the case, will be found not only to relieve the hyperæsthesia, but the patient will sleep naturally, his bowels and kidneys act normally, and after the remedy has been employed several days the improvement in his condition will be noticeable to every one.

When there is any associated disease that must of course receive such treatment as it may require to bring it within the pale of curability.

But in most of the cases which come to us for treatment, we shall find that Daniel's Conc. Tinct. *Passiflora Incarnata* is sufficient in itself to bring about a cure.

We make a great mistake in giving these patients a variety of medicine. One medicine taken with regularity is generally sufficient to bring us the desired results.—*Exchange*.

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### A Remedy Proposed for the Evil of Substitution.

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By J. D. WILLIAMS, M. D., New York.

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There can be no subject of more importance to physicians than the violation of their confidence on the part of a dishonest dispensing druggist. Law will not make a dishonest man honest, but the right law properly executed will prevent a criminal's further infliction of injury upon society. The requirement of a license to all druggists who dispense drugs or medicines, revokable upon the licensee's being convicted of substituting any ingredient, drug or medicine other than, and in lieu or instead of, that specified in the prescription, order or request in writing, of any physician, would go a long way to aid in the matter of honestly filling prescriptions. Let the medical societies induce their respec-

tive State Legislatures to enact a law requiring such a license, with a simple and practical procedure for establishing the guilt and enforcing the penalty against infraction, and the practice of substitution would soon cease.

Let proceedings for revocation of license be before the court, board, or officer, empowered to issue the license, and be set in motion at the relation of either the Board of Health, a local medical society, or the purchaser upon whom the fraud and imposition had been done, or of the physician by whom the prescription or order was issued or given, or of any person, firm or corporation for whose brand or make of drug or medicine the substitution had been perpetrated. Let the licensing board, court, or officer be empowered to issue citations, subpoenas for witnesses, to administer oaths, and be given all other requisite powers for duly trying the issues and revoking the license of the guilty—*Exchange*.

#### The Surgery of the Ureters.

The omission of two words and a date from a recent editorial comment in this journal on "Ureteral Implantation," transformed a harmless criticism into an inaccuracy that would have been absurd were it not unjust to the eminent men identified with this line of pelvic surgery. Since the older days, but a quarter of a century ago, when injury to a ureter meant extirpation of the associated kidney, the surgical treatment of disease or injury of the ureter has been revolutionized. The conservative tendency which has pervaded the entire field of surgery is nowhere better exemplified than here. No longer, save in extreme cases, is Simon's method of nephrectomy the only resource when the ureter has, in the course of a hysterectomy, been torn or severed by the knife. There have been numerous devices suggested and put into actual practice to remedy this grave accident without sacrifice of a healthy functioning kidney. Implantation of the injured ureter into the bladder, rectum, vagina and elsewhere has been attempted, not always with success in the individual cases, but ever with an onward movement toward ultimate success in the development of the method. The operators identified with this brilliant advance in abdominal and pelvic surgery are many. Time and space would forbid here a complete record of the names even of the men in this country alone who, by experimental research on dogs and other animals, or who, by actual performance on the human

being, have saved valuable lives without loss of organs that would otherwise have been invariably sacrificed. Van Hook, Kelly, Baldy, Boldt, Bovee, Emmet, Baldwin, Penrose, Fullerton, Krug, Noble, and many others—all eminent authorities in their chosen field of work—are included among these bold and successful pioneers in ureteral surgery; and Laphorn Smith, of Montreal, has just contributed a paper on this subject to this journal. While it will not be convenient nor advisable to give here a complete historical review of the development of this line of surgical intervention, mention should be made of the various methods that have been resorted to in the effort to save an injured ureter. These may be grouped under two great headings, namely, those involving a reunion of the severed segments of the ureter—uretero-ureterostomy in its four main forms of transverse end-to-end, oblique end-to-end, the end-in-end, and the lateral implantation or end-in-side—and the various methods of implantation of the proximal extremity of the ureter into other viscera, mainly the bladder—ureterocystostomy. The operations performed by these divers methods now number very many, and the results have, in the main, been most gratifying. The anastomosis of the ureter is decidedly the most difficult in its technique, but if there has not been much loss of tissue, this is the proper treatment to pursue. The oblique end-to-end method probably gives the best results, with less danger of ultimate ureteral stenosis. Implantation into the bladder is a much easier operation than ureteral anastomosis, hence its popularity among abdominal surgeons. It should also be noted, however, that in many of the operations the primary injury to the ureter had resulted in a uretero-vaginal fistula which could more readily be remedied by this method of operating. These secondary implantations have far outnumbered those performed intraperitoneally at the time of the original injury to the ureter. Vesical implantation is indicated when there has been much loss of ureteral tissue, in the presence of ureteral fistulæ, or when the ureter is so disorganized that the methods of anastomosis cannot be applied. It is preferably performed by the abdominal route. Implantation into the rectum or colon is apt, sooner or later, to be followed by infection of the ureter and kidney, with subsequent death of the patient; it should be employed only when other methods are impracticable, as in ectopia vesicæ, or in grave injury or involvement of the ureter and surrounding parts from cancerous and other changes. Implantation of the ureter into the



vagina or on to the skin surface of the abdomen are both open to disadvantages that are obvious, such as the necessitating the wearing of cups and other apparatuses. Bovee states that skin-grafting of the ureter has been done but ten times, and vaginal implantation but three times.

It will be seen, therefore, from this condensed summary of ureteral surgery that a new field of considerable dimension has been opened in surgical technique. Already the surgery of the ureter has won for itself an established place, and its literature commands the respectful attention of the general as well as the pelvic surgeon. Its annals are full of magnificent successes, and all honor is due those who, by their untiring efforts, have developed a new means of aiding afflicted humanity.—*The Philadelphia Medical Journal*.

#### Injury and Diabetes.

F. Hirschfeld, in *The Münchener Med. Wochenschrift*, considers the relation of trauma to this disease, and the extent to which accidents may be held responsible for its production. A distinct connection between the two is often traceable, particularly in the case of diabetes of nerve origin, in which the central nervous system appears to be implicated, and which is not infrequently susceptible of cure or improvement. When there already exists some lesion of the pancreas, the possibility is far from remote that a trauma might set up sufficient disturbance to precipitate the onset of diabetic trouble, while accidents may be the cause of pancreatic lesions themselves, such as cysts, hemorrhages, and, possibly, chronic inflammations. Long-standing diabetes may be unfavorably influenced by shock, the severest contingency to be feared being the inauguration of coma. In rare instances, even when the disease is only slight, coma may be precipitated in this way, and doubt may then exist as to whether the condition is due to the accident or the constitutional trouble. There is often great difficulty in deciding as to the proper valuation of trauma and disease in the production of gangrene, though even a trifling injury may be productive of serious results in a but slightly diseased vascular system. Muscular capacity is greatly decreased in diabetes, and patients belonging to the working classes are usually to be considered as being incapacitated.—*The Med. Record*.

FOUND.—The man who likes his work has found the philosopher's stone.—*Life*.

### News and Abstracts.

Be sure and read the advertisements in this number. If there is any preparation which you would like to try do not hesitate to write the advertiser for samples.

#### Officers Elected.

At a recent meeting of the Penobscot Co. Medical Association the following officers were elected: President, W. L. Hunt, M. D., Bangor; Vice-President, C. P. Thomas, M. D., Brewer; Sec. and Treas., B. L. Bryant, M. D., Bangor; Executive Com., E. T. Nealey, M. D., H. T. Clough, M. D., E. B. Sanger, M. D., Bangor.

#### A. E. T. A.

The American Electro-Therapeutic Association will hold their Twelfth Annual Meeting, at the Katerskill, Catskill Mountains, N. Y., on Tuesday, Wednesday and Thursday, September 2d, 3d and 4th, 1902.

Officers are: President, Dr. Fred H. Morse, Melrose, Mass.; Secretary, Dr. George E. Bill, Harrisburg, Pa.; Treasurer, Dr. R. J. Nunn, Savannah, Ga.

#### An Important Number.

*The Alienist & Neurologist*, for January, 1902, contains: The Acquirement of Nervous Health, by F. Savary Pearce, M. D.; Manual Stigmata of Degeneration, by J. Elvin Courtney, M. D.; Juvenile Female Delinquents, by E. S. Talbot, M. D., D. D. S.; Clinical Observations on a New Hypnotic, by Dr. H. Schoenfeld; Medical Aspects of the Czolgosz Case, Medical Inquiry and the Guillotine Commended for Capital Crime, A Psychological Opportunity Lost, by Charles Hamilton Hughes, M. D.; Leon F. Czolgosz, A Descriptive Analysis on the Basis of the Bertillon System, by Rev. August Drahm; Consciousness and the Neural Structure, by James G. Kiernan, M. D.; Sexual Inversion Among Primitive Races, by O. G. Seligmann, M. D.; Science and Christian Science, by Paul Paquin, M. D.; besides the regular Selections, Editorials, Book Notices, Publishers' Dept., etc.

NERVOUS SPECIALIST NEEDED. He.—You know, if you worry about every little thing, it's bound to affect your health.

His Wife.—Yes, I know. That's one of the things I worry about.

### Nothnagel's Encyclopedia of Practical Medicine.

Edited by ALFRED STENGEL, M. D., Professor of Clinical Medicine in the University of Pennsylvania; Visiting Physician to the Pennsylvania Hospital.

It is universally acknowledged that the Germans lead the world in internal medicine; and of all the German works on this subject, Nothnagel's "Encyclopedia of Special Pathology and Therapeutics" is conceded by scholars to be without question the best system of medicine in existence. So necessary is this book in the study of internal medicine that it comes largely to this country in the original German. In view of these facts, Messrs. W. B. Saunders & Company have arranged with the publishers to issue at once an authorized edition of this great encyclopedia of medicine in English.

For the present a set of some ten or twelve volumes, representing the most practical part of this encyclopedia, and selected with especial thought of the needs of the practical physician, will be published. The volumes will contain the real essence of the entire work, and the purchaser will therefore obtain at less than half the cost the cream of the original. Later the special and more strictly scientific volumes will be offered from time to time.

The work will be translated by men possessing thorough knowledge of both English and German.

Each volume will be edited by a prominent specialist on the subject to which it is devoted. It will thus be brought thoroughly up to date.

The American edition will be more than a mere translation of the German; for in addition to the matter contained in the original, it will represent the very latest views of the leading American specialists in the various departments of internal medicine. The whole system will be under the editorial supervision of Dr. Alfred Stengel, who will select the subjects for the American edition, and will choose the editors of the different volumes.

Unlike most encyclopedias, the publication of this work will not be extended over a number of years, but five or six volumes will be issued during the coming year, and the remainder of the series at the same rate. Moreover, each volume will be revised to the date of its publication by the American editor. This will obviate the objection that has heretofore existed to systems published in a number of volumes since the subscriber

will receive the completed work while the earlier volumes are still fresh.

The usual method of publishers, when issuing a work of this kind, has been to compel physicians to take the entire system. This seems to us in many cases to be undesirable. Therefore in purchasing this encyclopedia, physicians will be given the opportunity of subscribing for the entire system at one time; but any single volume or any number of volumes may be obtained by those who do not desire the complete series. This latter method, while not so profitable to the publisher, offers to the purchaser many advantages which will be appreciated by those who do not care to subscribe for the entire work at one time.

This American edition of Nothnagel's Encyclopedia will, without question, form the greatest system of medicine ever produced, and the publishers feel confident that it will meet with general favor in the medical profession.

#### Dr. J. A. Spalding's Essay.

The American Text-Book of Pathology is a credit to both the skill and the literary ability of American physicians. The writers of the several sections are all specialists of known reputation and experience and the result is a book which is both exhaustive and scientific, and well represents the status of our present knowledge of this important subject.

The article upon the ear was written by our well-known specialist Dr. James A. Spalding, of Portland, and is on a par (as we should expect it to be) with the high standard maintained throughout the book. It is clear and concise and more than this is instructive and interesting. It is an honor to be chosen to expound a subject in this book, and the editors chose well in selecting Dr. Spalding.

#### The Antikamnia Calendar.

The Antikamnia Chemical Co's. Calendar for 1902 is a real work of art both in the original conception and in the reproduction. It is an artistic copy of Helen Hyde's well-known painting "The First Picture Book," and is an art-gift that will be appreciated by the members of the medical profession.

LITTLE SAYINGS OF LITTLE PEOPLE.—It was a four-year-old who asked, "Papa, have you done anything down town today that you think I ought to whip you for, if I was as big as you are?"

**Phillips' Emulsion** 50% best NORWAY COD LIVER OIL  
minutely sub-divided,  
WITH WHEAT PHOSPHATES (Phillips')  
Pancreatized, Palatable, Permanent, Miscible in Water, Milk, Wine, etc.

**Phillips' Milk of Magnesia**  $Mg\ H_2\ O_2$  (FLUID.)  
"THE PERFECT ANTACID."  
for correcting Hyperacid conditions—local or systemic.  
Vehicle for Salicylates, Iodides, Balsams, etc.

**Phillips' Phospho-Muriate  
of Quinine, COMP.**  
TONIC AND RECONSTRUCTIVE.  
WHEAT PHOSPHATES, WITH MURIATE OF QUININE AND STRYCHNINE.

PHILLIPS' WHEAT PHOSPHATES (ACID).  
PHILLIPS' SYRUP OF WHEAT PHOSPHATES.  
PHILLIPS' DIGESTIBLE COCOA.

THE CHAS. H. PHILLIPS CHEMICAL CO., NEW YORK.

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# MELLIN'S FOOD

Doctor, is your little patient happy and contented?

If not, send for a sample of Mellin's Food and try it.

Mellin's Food is good for babies of all ages because it adapts itself to the different conditions and requirements. Mellin's Food makes babies happy.

SAMPLES AND LITERATURE TO PHYSICIANS UPON REQUEST.

MELLIN'S FOOD COMPANY, BOSTON, MASSACHUSETTS.

### Feeling the Nurse.

Evidently things are getting in bad shape in England, if we are to believe the statement made by a correspondent in a recent number of *The Lancet*. There are rumors that there is a division of the fee among some of the members of the profession here, but this division is between the surgeon or the consultant and the family physician of the patient. On the other side, however, they seem to have gone one better and a division of the fee is made with the nurse. According to the correspondent, certain medical men over there are paying sums from a shilling to half the confinement fee, or more, to the nurses in attendance, who, to use their own words, make their living from "following the doctors." This tipping of the nurses is done with the hope that the recipient of the fee will recommend the doctor to future patients and, in other words, act as his drummer. As *The Lancet* editorially comments, the probability is that things are not quite so bad as this correspondent makes them out to be, even in England, where tipping is such a common every-day and every-where affair.—*Journal of the American Medical Association*.

### Hayden's Viburnum Compound.

This long and favorably known compound has stood the test of both time and experience, and has come into general use by reason of its real merit.

It is a palatable combination of several drugs that have been proved to exert an especial action on the generative organs.

By reason of the scutellaria which it contains, this compound is a favorite preparation with many physicians in chorea and other nervous affections of children.

Chicago has established an unenviable reputation as a suicide center. Her population, 1,698,575, represents one forty-fifth of the population of the United States, but her suicides for the past year were 385 as against 5,340 for the whole country in 1900. Hence, Chicago, having only one forty-fifth of the population had one-thirteenth of the suicides of the nation. According to the *Philadelphia Press*, the suicide-rate for Chicago is four times as great as that for London. Life in all its phases is fast and furious in Chicago, and these melancholy figures help to tell the story.—*The Phil. Med. Jour.*

Only  $4\frac{1}{2}$  per cent. of the babies born annually live to the end of the allotted three score years and ten of man's existence. Yet of the other  $95\frac{1}{2}$  per cent. nearly 20 per cent.

die unnecessarily. The facts came out in a paper on "Unnatural Death," read at the recent meeting of the Sanitary Institute of England. The author told his hearers that about one million babies were born annually in England. Thirty thousand of the million would die violent deaths from accident, 30,000 would die unnecessarily from tuberculosis, and 120,000 more from other absolutely preventable causes, such as smallpox, measles and scarlet fever. Only 45,000 would be allowed to live out their natural lives, and nearly one in twenty would die because the machine was worn out. One-fourth of all the diseases which destroy life are absolutely preventable, and fifteen years would at once be added to its average duration if the practice of hygiene were placed on a level with its theory.—*The Chicago Clinic*.

### Antikamnia and Heroin Tablets in Prevalent Gripplal Conditions.

Thos. G. Rainey, M. D., L. R. C. P., Resident Physician, British Medical Institute, Atlanta, Ga., in a recent article, states that the comparatively new combination of drugs, antikamnia and heroin tablets, which has been so largely used for the control of cough, is also being successfully employed, to a large extent, in the treatment of nearly all affections of the respiratory tract, which are accompanied by dyspnoea and spasm, namely, Asthma, Bronchitis, Laryngitis, Pneumonia, Phthisis, Whooping Cough, Hay Fever, La Grippe, etc. In cases in which the patients were suffering from the severe attendant pain of these diseases, it was found that this combination acted most satisfactorily. Each tablet contains five grains of antikamnia and one-twelfth grain heroin hydrochloride. One tablet was followed by a rapid diminution of pain, and after the third tablet the pain entirely disappeared. In treating the affections enumerated above, the dose is one tablet every two, three or four hours according to indication.

AMBIGUOUS.—Mr. Clunk (looking up from his paper)—"I wish these newspapers would be a little more explicit in their publication of the news. Here it says that old Totterly, who has been under the care of three physicians for a fortnight, is now out of danger."

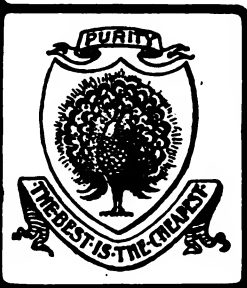
Mrs. Clunk—"Why, surely that is plain enough."

Mr. Clunk—"Is it? How is the uninitiated reader to know whether the invalid is on the high road to recovery, or dead and out of the reach of the doctors?"

THE BEST RESULTS ARE ASSURED IN BROMIDE  
TREATMENT WHEN YOU SPECIFY

# PEACOCK'S BROMIDES

AND THE GENUINE IS DISPENSED.



NEUROLOGISTS and General Practitioners prefer it because of its superior qualities over the commercial salts. . . Each fluid drachm represents fifteen grains of the combined chemically pure Bromides of Potassium, Sodium, Ammonium, Calcium and Lithium.

DOSE: ONE TO THREE TEASPOONFULS, ACCORDING TO THE AMOUNT OF BROMIDES REQUIRED.

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From CHIONANTHUS VIRGINICA.

RE-ESTABLISHING  
portal circulation  
without producing  
congestion. Invaluable  
in all ailments due to  
hepatic torpor.

Hepatic  
Stimulation.

Without  
Catharsis.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES A DAY.

FOR CLINICAL TRIAL WE WILL SEND FULL SIZE BOTTLE TO ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

PEACOCK CHEMICAL CO.  
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In CARDIAC and GENERAL MUSCULAR RELAXATION,  
due to Functional Cardiac and Circulatory Disturbances,

# CACTINA PILLETS

Has many Advantages over other Heart Stimulants.

IT HAS NO CUMULATIVE ACTION, AND  
IS ABSOLUTELY SAFE AND RELIABLE

EACH PILLET REPRESENTS ONE ONE-HUNDREDTH OF  
A GRAIN CACTINA, THE ACTIVE PROXIMATE PRIN-  
CIPLE OF CEREUS GRANDIFLORA

DOSE: ONE TO FOUR PILLETS THREE TIMES A DAY.

SAMPLES MAILED TO PHYSICIANS ONLY.

The CHIEF Characteristics of the Physiological Action of

# SENG

Is to promote Normal Digestion by encouraging the flow of Digestive Fluids.

It is the Modern and Most Successful Treatment for

INDIGESTION.

A PALATABLE PREPARATION OF PANAX SCHINSENG  
IN AN AROMATIC ESSENCE.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES  
A DAY.

A FULL SIZE BOTTLE, FOR TRIAL, TO PHYSICIANS WHO WILL PAY EXPRESS CHARGES.

SULTAN DRUG CO., St. Louis, Mo., U. S. A.

### The Treatment of Functional Insomnia.

By JOHN S. MOREMAN, M. D., Louisville, Ky.  
[*Medical Progress*, December, 1900.]

I am now in the habit of having my patients take a bath half an hour before bedtime, and a dose of Chlorotone, of ten to fifteen grains, just after coming out of the bath. This drug causes the patient to sleep on until morning, when he awakes feeling refreshed. If the bath alone be given, the probability is that the patient will awake in the middle of the night and remain awake until morning.

The German army authorities, in 1897, made some experiments with regard to the sustaining and invigorating properties of sugar which proved conclusively that it is an adjunct to the soldier's diet of almost inestimable value. It was declared that a few lumps of sugar acted like a charm against fatigue as well as in quenching thirst. The British government followed the example set it by the Germans, and now provides its soldiers with 87 gm. of sugar daily. The result of the experiment has been most satisfactory in the South African campaign. Our army, too, in its revised ration scale, is allowed a generous amount of sweet food, but the time of trial has not yet been long enough to pass judgment as to its effects, although there is no reason to doubt that the American soldier will assimilate sugar with as much benefit to his health as have his European fellows.—*Med. Record*.

### A Word of Praise.

It gives me pleasure to say a kind word for Sanmetto—it surely deserves praise. I have been using Sanmetto in all affections of the genito-urinary tract, and it is by far the most reliable and *unfailing* agent of its class known to me in thirty-one years' experience as a medical practitioner. *Vivat Sanmetto!*

H. D. GUIDRY, M. D.

Scott, La.

**FORMALDEHYDE GAS FOR DESTROYING MOSQUITOES.**—Dr. M. J. Rosenau declares, in a recent issue of *Public Health Reports*, that experiments undertaken by him have shown that formaldehyde gas is an efficient insecticide so far as the mosquito is concerned. The experiments were all made upon the *Culex pungens*, and it was found that an exposure of three hours was invariably sufficient to kill all the mosquitoes of this variety in a confined space, provided the gas was used in amounts usually employed for disinfection.—*The Medical Record*.

### Clinical Experience.

A prominent physician reports as follows: "CASE 8.—This patient was a boy eight years of age, who has been from birth a puny, delicate creature. His parents never expected to raise him to this age, but he managed to exist, and that was about all. He was very susceptible to the various ills of childhood, but, oddly enough, pulled through them all; so I concluded the constitution was there, but that it needed sustenance. After an attack of pneumonia, through which I never thought to bring him out alive, I prescribed Hydroleine, and it affected a miraculous change in the child. In place of the accustomed pallor, wanness, energy-lacking, anæmic condition, which hitherto existed, there now appeared a healthy, robust, buxom boy, full of the exuberance of spirits, and looking at life with a different aspect altogether. The father and mother were so rejoiced at the change that they still continued the use of Hydroleine, although seven months had elapsed since its first employment."

**BEES FOR RHEUMATISM.**—Some years ago an Austrian physician advanced the theory that the virus of the bee sting is an infallible remedy for acute rheumatism, a fact which receives unquestionable confirmation from a custom of the country people in Malta. Bees are plentiful in this island, and their stings in such repute that resort to this primitive method of inoculation has been a common practice in severe cases of rheumatism, for generations, with most satisfactory results.—*Mediterranean Naturalist*.

G. E. Leachman, M. D., Louisville, Ky., reports the following case:

"J. C.—, age 40, consulted me for very sensitive bladder, with frequent desire to micturate; had been treated for some time with all sorts of solutions by irrigation—no relief—resolved to try Glyco-Thymoline (Kress); strength used, one and one-half ounces of Glyco-Thymoline (Kress) in a pint of warm water, irrigated the bladder twice a day for three days; cause seemed to be entirely eradicated, and patient is in good health for the first time in a year."

**WOULD COME BACK.**—Ikey, Jr. "Fader, I soldt a pair of pants to Mr. Cheatman for six-fifty, but he only had six tollars, and vill stop in tomorrow and pay der rest."

Ikey, Sr.—"Mine son, you've been swindled. He von't come back."

Ikey, Jr.—"Oh, yes he vill, fader. I gif him a pair dree sizes too small."—*Baltimore World*.



**A Product of the  
Highest Nutritive Value**

---

**ARMOUR'S**

**Extract of  
Red Bone Marrow**

---

This preparation is rich in the elements that are necessary to the economy. Its administration increases the percentage of hemoglobin, causes the red corpuscles to multiply, enhances the oxygen carrying power of the blood and stimulates the appetite.

Physicians with cases of Anemia, Marasmus and other obstinate diseases, should try the Extract of Red Bone Marrow and note results.

One to four teaspoonfuls in cold plain or carbonated water, beer or with Nux Vomica, dilute Phosphoric Acid and Fowler's Solution.

**Armour & Company  
CHICAGO**

### In Use Seven Years.

Nothing in the way of medicine ever gave me the satisfaction that Seng has. I commenced its use seven years ago, and, at that time, cured myself of a case of indigestion. I was much surprised and pleased with the good that it did at that time, and I have been prescribing it ever since.

L. ABBOTT, M. D.

Fremont, Ind.

**HORSE-FLESH.**—The consumption of horse-meat in Frankfort has increased. The first horse-meat dinner was given on October 6, 1847, at Bornheim, a suburb of Frankfort. As soon as a horse was slaughtered,—and at that time only young horses were killed,—the meat was sold at six kreutzers (about four cents) a pound. Yet it was not until fifty-four years later that the first horse-meat restaurant was opened. At the present time, about one thousand horses are slaughtered annually, and a separate slaughter-house has been built. The horse-meat butcher shops of Vienna, of which there are no fewer than one hundred and eighty-five, present a clean and attractive appearance, and are in no way distinguishable from the shops where the usual kinds of meat are sold, save by the sign announcing their specialty. Restaurant keepers who serve horse-meat must designate this fact in a special column on the bill of fare offered to patrons.—*Philadelphia Medical Journal*.

### Phillips' Phospho-fluoride of Quinine Compound.

This is a correct and elegant pharmaceutical preparation, has a clean, bitter taste, and does not disturb the stomach. Its action is prompt, and its curative properties are indicated in a wide range of diseases. It is especially prescribed to stimulate the appetite and digestion, to invigorate the nervous system, in functional disturbances of women, sexual debility, defective bone and tooth nutrition, malarial manifestations, and as a restorative during the convalescence from infectious and prostrating diseases.

**A SPECIAL ELECTRIC LAMP.**—It is stated that Dr. Sophus Bang, of Copenhagen, manager of the laboratory of Professor Finsen, the introducer of the light cure for lupus, has invented a special electric lamp, which gives but a feeble light, but is extremely rich in chemical rays. It is stated that the bacteriological power of this lamp is ten times as great as that of the ordinary arc lamp. Its cost is only about \$15.

**AN INVESTIGATION OF DANYZ'S VIRUS.**—Dr. M. J. Rosenau, of the Marine Hospital Service, has recently published an interesting bulletin recording the result of investigations carried on under his direction, with a view to discover the effect of the pathogenic microbe from which Danyz's virus is derived, as a destroyer of rats. Danyz's article on the subject appeared in the *Annales de l'Institut Pasteur*, in April, 1900, a translation of which was given in the *Public Health Reports* for May 25, 1900. It goes without saying that if a really effectual means of destroying rats on a large scale can be worked out, plague will be, if not extirpated, at least checked to a very appreciable extent. Consequently, experiments of the nature of these undertaken by Dr. Rosenau, under the auspices of the Marine Hospital Service, possess an immense practical value. So far as the investigations concerning Danyz's virus are concerned, the conclusions arrived at by the workers of the Marine Hospital Service Laboratory can hardly be termed very encouraging. Its virulence has been raised and specialized by artificial means in the laboratory, so that it has become fatal for rats by ingestion. This artificial virulence is not very stable. It may be maintained under special conditions a few months, but the virulence is apt to fall off, especially on exposure to light and air. The effect upon rats depends somewhat on the amount ingested. Large amounts are quickly fatal. Small quantities are uncertain. Rats that survive the ingestion of the virus are rendered immune. In many respects, it resembles a chemical poison, with the great advantage that it is harmless to man and beast. However, it has the disadvantage of rendering animals immune by the ingestion of amounts that are insufficient to kill. The virus may, therefore, be used as one of the means in the fight against rats; but it is far from being a sure means of exterminating these rodents in a particular place.—*The Medical Record*.

**HER OPPORTUNITY.**—He (rising to say good-night)—“Well, I really must go, Miss Caroline. I've enjoyed myself immensely.”

Boston Maid (with frigid politeness)—“Really, I'm glad, I'm sure. I have enjoyed you too.”

**AN EQUAL DIVISION.**—“So they were divorced, eh?”

“Yes; for incompatibility of temper.”

“How did it come about?”

“Well, you see he had the incompatibility and she had the temper.”

# The Question——?

**Used to Be** “What is a good preparation to give during the convalescent period of an acute disease?” But we don't hear that any more.

**The Question now asked is this?** “Which is the best preparation to give during the convalescent period of an acute disease?” The market is overstocked with ‘good’ ones; merit has become common. It's superiority that wins to-day.

“Colden's Liquid Beef Tonic” (Ext. Carnis Fl. Comp. Colden) composed of Beef, Iron, Cinchona, and Brandy. (Formula No. 1); and of Beef, Cinchona, and Brandy, alone, (Formula No. 2); has been seldom equalled, never surpassed. “It feeds the blood, invigorates the system, and restores the health.”

The CHARLES N. CRITTENTON CO., Sole Agents for the United States.


Laboratory: 115 and 117 Fulton St., New York.

Samples sent free on application, to physicians.

THE ALKALINITY OF BLOOD SERUM

## GLYCO-THYMOLINE

(KRESS)



Birmingham Nasal Douche.

### A PURGATIVE *For Mucous Membrane*

INDICATED IN ALL CATARRHAL CONDITIONS, ESPECIALLY

### NASAL CATARRH

“Glyco-Thymoline (Kress) is well adapted for the treatment of catarrhal conditions of the mucous membranes. I have frequently employed it with benefit in nasal, buccal and bronchial affections. Direct local medication is of much advantage in these cases. In some instances we may safely depend on topical measures alone; in those where internal treatment is also necessary, Glyco-Thymoline (Kress) proves an excellent adjuvant.”

MEDICAL BULLETIN, Phila., Pa., March, 1899.

**SPECIAL OFFER**

A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges. K & O Douche to physicians, 15 cts.; \$1.50 per doz. Retail 25 cts. Remit stamps.

**KRESS & OWEN COMPANY, Chemists, 221 Fulton Street, New York**

**HASTENS RESOLUTION AND FOSTERS CELL GROWTH**

### Regimental Skin-Graft.

In Englewood, N. J., 56 members of the Second Regiment, New Jersey National Guard, will give from two to four square inches of skin to save the life of one of their number who was severely burned in a gas explosion August 27. Dr. Currie, who is colonel of the regiment, operated upon 22 men December 15, removing portions of skin from their left arms, soaking them in normal salt solution, and transferring them to the body of the patient. The men had but a slight conception of the pain of the operation, and gave evidence of suffering keenly. When the operation was concluded, new skin had been grafted on the patient's left arm, left chest, one side of the neck, and a portion of the head and face. The entire process took ten minutes less than four hours. At another operation next Sunday, skin will be grafted on the patient's left side, part of the abdomen, and both legs.—*Phil. Med. Jour.*

**FURTHER COMMUNICATIONS ON THE ANGINA DUE TO THE SPIROCHÆTE BACILLUS.**—H. Solomon reports, in the *Deutsche Med. Wochenschrift*, that, though very rarely associated with true diphtheria, this organism is often found in syphilis of the throat. A study of the statistics of the city of Frankfurt, covering 737 cases, in which throat cultures were made, revealing the presence of the spirochæte bacillus in but three, and in none of these nor in those described in the literature was it found together with the bacillus of diphtheria. It may therefore be concluded that when the presence of the spirochæte flora has been discovered, diphtheria may almost with certainty be excluded—a fact of some practical importance. In specific diseases of the pharynx, however, the organism occurs with comparative frequency and in two cases, which are described in detail, formed, what was clinically speaking, the primary lesion; it was only after the disappearance of an obstinately persistent membrane that the tonsils became fissured, and true mucous patches developed. In but one case of stomatitis was the bacillus formed; this was in a boy of five, suffering from aphthous stomatitis which showed almost pure cultures of spirochætæ and bacilli fusiformes.—*Med. Record.*

Fellows' Syrup of Hypophosphites is a preparation known and praised by physicians the world over. To have won such distinction from the members of a conservative profession, the remedy must of necessity possess intrinsic merit and have stood the test of both time and experience.

**TRAGEDIES OF A GREAT CITY.**—The report of the Coroner of Chicago for the twelve months ending November 30, reveals some of the tragedies of which a great city is so prolific a source. In the course of the official year the coroner was called upon to investigate 4,844 deaths, in 2,479 of which inquests were found unnecessary. The leading causes, and the number of sudden or violent deaths ascribed to each are shown in the following table:—

Suicides.....	385
Railroad accidents.....	290
Falls.....	206
Homicides.....	103
Street car accidents.....	72
Burned.....	68
Accidental and undetermined drownings.....	135
Accidental and undetermined asphyxiation...	60
Heat prostrations.....	38
Elevator accidents.....	27
Suffocation.....	29
Lockjaw.....	15
Accidental and undetermined poisoning.....	51
Machinery accidents.....	20
Lightning.....	12
Accidental shooting.....	11
Kicked by horses.....	10
Scalds.....	43
Hydrophobia.....	8

—*The Philadelphia Press.*

Mrs. B., age 43. Was referred to me having irregular menstruations two or three times a month. Ovarian pains constantly, profuse and purulent leucorrhœa. I had about decided to curette, when the condition of the heart dissuaded me, and resolved to use Ergoapiol (Smith) in large doses, when a profuse hemorrhage for seven days followed, evacuating large blood clots, relieving the patient to normal condition with no after-effect, and with subsequent treatment was restored to good health.

E. A. MALLETT, M. D.

**SURGICAL TREATMENT OF ENTEROPTOSIS.**—Lambotte states that surgical intervention aims to remedy the partial or total prolapse of the colon, and the trouble so caused in the passage of fæces. The operation consists essentially in the fixation at the two sides of the angles of the transverse colon. A series of sutures is made through the abdominal wall. The writer has obtained happy results in the majority of his cases.—*Gazette Hebdomadaire*, August 29, 1901.

**NEWSPAPER MEDICINE.**—Mrs. Thomas Shelton was operated on this morning at the home of her son Alfred, for necrosis of the bone, by Dr. Herrick, assisted by Drs. Burke and Coutant. A piece of dead bone was removed from the tibia of the right eye.—*Country Newspaper.*

THE SELECTIVE INFLUENCE OF

**GRAY'S** Glycerine **TONIC** Comp.

upon the respiratory tract is indisputable. It allays the cough and respiratory distress of bronchitis, winter cough, pneumonia and influenza. It invigorates the whole system too.

THE PURDUE FREDERICK CO.,

No. 15 Murray Street, New York.

**PERPLEXITIES**  
*in the Treatment of Diseases of Women*

are readily overcome by the use of  
**MICAJAH'S**  
*Medicated Uterine*  
**WAFERS**

Their ANTISEPTIC, ASTRINGENT and ALTERATIVE action renders them of especial service in congestions and inflammations of the mucous membranes of the Genito-Urinary tract.

**Sig:** Insert Wafer into the vaginal canal, up to the Uterus, every third night, preceded by copious injections of HOT water.  
 LIBERAL SAMPLES AND BOOKLET "HINTS ON THE TREATMENT OF DISEASES OF WOMEN" SENT GRATIS BY MAIL.

**MICAJAH & CO.** **WARREN, PA.**

ESPECIALLY INDICATED  
 IN  
 Gonorrhea  
 Vaginitis  
 Vulvitis  
 Leucorrhea  
 Endometritis  
 Granular-Os  
 Urethritis  
 Cytitis  
 Uterine  
 Displacement  
 &c. &c.

A well-known physician says of Panopepton:

"The patient, a man thirty-seven years of age, suffering from great thirst, vomiting of blood and mucus, much epigastric distress, persistent retching every three hours; considerable depression, constipation, headache, etc. A tablespoonful of Panopepton, usually on cracked ice, with a drop or two of lemon to flavor, was given six times daily, and, with the exception of a little milk occasionally, was the sole food. The symptoms were immediately improved from the start, and patient made a splendid recovery. This was four months ago, and patient says he feels and looks better than ever before, having gained six pounds in weight, and is now able to eat almost anything without any discomfort whatever.

"I desire to state that I have prescribed Panopepton in many similar cases, with the most satisfactory results. If I could spare the time, I could give you reports of over two dozen cases treated successfully by Panopepton."

HELPING HIM OUT—Wife—"Never mind if you have failed, dear. I have fifteen hundred dollars saved up from the pin-money that you have given me from time to time."

Husband (joyfully)—"You make me feel easier. What a help!"

Wife—"Help! I should say so. Why, on this money I can keep up my wardrobe for a year to come."

It affords me especial satisfaction to express my pleasure regarding the excellent effect of Pepto-Mangan (Gude). I have employed this preparation repeatedly with great success. The rapid and marked improvement of the appetite in anæmic patients, as well as the improvement in the general condition, was most surprising. I intend to continue the further use of your valuable remedy with the greatest confidence, and remain with an expression of my highest esteem,

DR. LEOPOLD EGLSEER,  
District Physician.

Obernberg, a/S. Upper Austria.

Dr. Risus Sardonicus says:

"The most remarkable thing about human nature is that every man sets great store by the talents he himself possesses. These talents may seem poor and unworthy to others, but there seems to be no man to be found who, if he is to be anyone but himself, would exchange places and personalities with any man, no matter how renowned or noble he

may be. It's a mighty good thing that, at the bottom, we are all satisfied."

Dispassionate critics have always recognized that among the advantages of college athletics is the regard for physical health which they encourage in the student. A course of training for athletic honors is a discipline not only for the body but also for the mind; it promotes bodily vigor at the same time that it inculcates mental and moral control. The risks even from football are not so great as the risks from alcohol and cigarettes. Dr. Seaver, of Yale University, finds in the Freshman class this year an unusual lung capacity, with marked athletic tendencies and a reduced consumption of tobacco. His figures are interesting, his deductions are warranted, and his studies are to be commended.—*The Philadelphia Medical Journal*.

#### Orthoform Lozenges to Mitigate Odynophagia.

Dr. Solomon Solis-Cohen in "*American Medicine*," November 9, 1901, reports as follows:

For the temporary relief of the pain attending inflammatory and ulcerative affections of the throat, Orthoform applied in various ways is probably the best agent now at our command. For two years past the editor of this department has been making use of lozenges containing each from  $\frac{1}{2}$  gr. to 1 gr. of Orthoform, in cases of acute and subacute sore throat (tonsillitis, pharyngitis, etc.), whether of rheumatic or other origin, and in cases in which pain in swallowing has been caused by ulcerative or infiltrative conditions involving the epiglottis and arytenoid eminences.

The attention of physicians is called to the advertisement of Victor Koechl & Co. in this number. This firm has always been strictly ethical in its dealings with the profession, and, by honorable methods and the real merit of its preparations, has achieved a successful business. Therefore, whatever they offer the medical profession is worthy of careful consideration.

#### A Liver Invigorator.

Editor *Uric Acid Monthly*:—I prescribed seven bottles of thialion during the past week. It seems to continue to meet my full expectations. I believe it to be a great liver invigorator. Have recently used it in a case of acute articular rheumatism with excellent results.

Very sincerely yours,

DR. L. S. STOLL.

Smithland, Iowa, Mar. 31, 1901.



# The Oncome of Age.

There are many conditions of  
advancing life in which

## Fellows' Syrup of Hypophosphites

is beneficial, viz :—

### DISEASES OF THE

Assimilative Organs.

Circulatory Organs.

Respiratory Organs.

Nervous System.

The value of a stimulant in the enfeebled digestion of the aged has been recognized from the earliest time.

For those who decline to accept the aid of wine, and who need something of a stimulant character to rouse the flagging powers of digestion, Fellows' Syrup of Hypophosphites offers special advantages. In all conditions commonly met with in persons of Advancing Life, a tonic like Fellows' Syrup is clearly indicated.

Dr. Milner Fothergill wrote: "It (Fellows' Hypophosphites) is a good all-around tonic, specially indicated where there is Nervous Exhaustion.

SPECIAL NOTICE:—Fellows' Syrup is advertised only to the Medical Profession; is never sold in bulk, and physicians are cautioned against worthless substitutes.

Medical letters may be addressed to

**Mr. Fellows, 26 Christopher Street, New York.**

**A VERY SERIOUS CASE.**—Late one evening a doctor received a note from a couple of fellow-practitioners, saying: "Pray, step across to the club; we are one short for a rubber." "Emily, dear," he then said to his wife, "I am called away again. It appears to be a very serious case, for there are two doctors already in attendance."

**HEROIC MEASURES NEEDED.**—Doctor: Well, you got those leeches I sent for your husband, Mr. Giles?

Mrs. Giles: Yes, zur; but what on earth be th' good o' sending the little things for a girt big chap like he! I jes' took an' clapped a ferret on 'um!—*Punch*.

**THE EXPERIENCE OF FORTY-TWO CASES OF GOITRE TREATED BY OPERATION.**—A. Marmaduke Shield, in *The Edinburgh Med. Journal*, concludes from his experiences that medical treatment should not be neglected in cases of goitre. The administration of iodide of potassium with tincture of iodine, in the proportion of three grains of the former with one minim of the latter in infusion of gentian, three times a day, may cause small goitres to disappear entirely. Goitres which tend progressively to increase should be operated on before they grow to a huge size, and before their deep connections become complicated. Removal of one lobe and the isthmus is practically always followed by atrophy of the corresponding lobe. The operation is free from special risk if done properly, and with the assistance of an experienced anaesthetist. Large, old, adherent goitres still remain difficult and dangerous to remove. It is the duty of every practitioner to urge this upon his patients, and submit them to operation while removal is yet comparatively safe and easy.—*The Medical Record*.

**Precocious children:** "I know," said the little girl to her elder sister's young man at the supper table, "that you will join our society for the protection of little birds, because mamma says you are very fond of larks."

#### Repaired Old Livers.

Allow me to say that Peacock's Bromides and Chionia are two preparations that I call big guns of my armamentarium. For their respective indications I regard them as peerless. A sample dose to a patient in my office suffering from nervous agitalia makes a customer for Bromides; they come and say, "Doctor, I want more of that nerve quieting medicine." As to the Chionia, it has cor-

rected and repaired old livers and made them act like new ones. J. M. TRUE, M. D.

Oskaloosa, Ia.

**SHE LIKED THE HOSPITAL.**—Not long ago at a provincial hospital an old woman, who was being discharged completely cured, was having a last interview with the house physician. "Well," he said, "you have to speak well of the hospital now, won't you?" And the old woman replied: "Ay, that I will, doctor. But, sure, I never spoke ill of it. My 'usband died here."—*Current Literature*.

**"A MOVIN' MEDSIN."**—A colored woman threw the odds and ends of medicine left after her husband's death into the fire. The explosion that followed carried the stove through one of the windows. "Mos' pow'ful movin' medsin I eveh saw'd," said she. "No wondah the ole man gone died."—*Exchange*.

**THE ETIOLOGY OF ERYSIPELAS AND ITS RELATION TO THE PYOGENIC INFECTIONS.**—Jordan, in the *Münchener Medicinische Wochenschrift*, says that the distinction of true and false erysipelas is a doctrine no longer tenable, for many clinical varieties of the disease occur and etiologically there is no difference between them. It is rather a question of varying degrees of intensity of the same disease depending on the inconstant virulence of the cocci and the resistance of the tissues. The specific nature formerly ascribed to the disease can no longer be upheld, and in origin, nature, course and complications it bears a close analogy to acute osteomyelitis. Several cases are cited and references given which show that, although it is usually a streptococcus infection, staphylococci may also produce the typical picture of the disease, and experiments are described showing that in the rabbit's ear it is possible to produce typical erysipelas, not only with streptococci, but also with staphylococci, pneumococci, and bacteria coli. Human erysipelas is usually caused by the streptococcus pyogenes, but may also be due to the staphylococcus aureus, and it is still an open question whether pneumococci, bacteria coli, and typhoid bacilli may not also produce it.—*The Medical Record*.

**THOUGHT HE WAS COMPARATIVELY SAFE.**—A colored man at Pittsburg, Kansas, thus relates his experience with smallpox: "I have been exposed to it several times, was 'sasinated three times, they 'canteened' me for three weeks, but Dr. Johnson says if I have smallpox at all it will only be in a light case of 'celluloid'" — *Western Med. Jour.*

# Journal of Medicine and Science.

ISSUED ON THE TENTH OF EACH MONTH.

In the Interests of Public Health, and in order that the People of Maine may reap the great Benefits, both hygienic and economic, assured by a judicious Application of the Principles of Preventive Medicine, this Journal supports the following Propositions and urges Physicians and Laymen to work diligently to further their Consummation.

- 1st. The Establishment of a Sanatorium for the Treatment of the Consumptive Poor.
- 2nd. The Abolishment of the Coroner System and the Appointment of Medical Examiners.
- 3rd. The daily Inspection of School Children by School Physicians.
- 4th. The more liberal Endowment of our Medical Schools by private Charity, and the voting of larger Appropriations to our State and Local Boards of Health.
- 5th. The Establishment of a State Bacteriologic Laboratory.

For, surely, health is the prime essential to success in life, and the health of the people is the foundation upon which all their happiness and all their power depends.

Vol. VIII.

PORTLAND, MAINE, FEBRUARY, 1902.

No. 3.

## Original Articles.

### \*An Operation for Ventro-Suspension of the Uterus and Ovaries.

By W. L. COUSINS, M. D., of Portland.

**T**HE operation of ventro-suspension, as practiced by Kelly, has never appealed to me, although I have performed it many times for the want of a more rational and better method. In my recent operations for suspending the uterus, I have used a method which I believe is new to the profession, or, at least, I have never seen it described in any of the medical journals.

The operation briefly is as follows: An incision is made in the median line just above the symphysis, about an inch and a half long, or of sufficient length to admit two fingers, in order that the uterus may be brought up into the wound for inspection, and, at the same time, any adhesions may be broken up which may be present. After having gotten the uterus and its adnexa freed, so that it is perfectly movable, I then dissect away from the skin and the subcutaneous fat down to the fascia of the rectus muscle, pushing it back from the edge of the incision for about an inch and a half. I then take a sharp pair of forceps and introduce them about an inch

and a quarter from the edge of the median incision, on a line with the lower angle of the abdominal incision. The forceps are then pushed through the fascia muscle and peritoneum into the abdominal cavity. The next step of the operation is to grasp the round ligament about an inch and a half away from its uterian attachments and draw it up through the punctured wound made by the forceps through and above the external fascia of the rectus muscle. It is sutured there with catgut sutures. This procedure is repeated on the opposite side, and the abdominal wound is then closed with through and through silkwormgut sutures, and a running catgut suture for the fascia of the rectus muscle.

The immediate result of this operation is that the uterus is merely suspended by means of its round ligaments, so that there is a space between the uterus and the anterior abdominal peritoneum. The outer extremity of the round ligament is put on a stretch, and, in this way, lifts the broad ligament forward and upward and suspends the ovaries.

The operation not only corrects a retro-displaced uterus, but, at the same time, it suspends the prolapsed ovaries, which almost invariably accompany a retro-displaced uterus.

I have performed this operation but three times, and, of course, understand that it is far too early to predict what the results may be, but thus far it has proven successful,

\*Paper read at the forty-ninth stated meeting of the Maine Academy of Medicine and Science, held Jan. 13, 1902.

relieving the symptoms, as well as holding in suspension the uterus and the ovaries.

The pain following this operation is comparatively slight, much less than the pain which follows the ventro-suspension originated by Kelly. I permit my patients to get up at the end of fourteen days, and leave the hospital at the end of two weeks and a half. As I said before, it is too early to make any predictions, or to state what effect this operation may have upon gestation, but I think it is safe to say that it certainly will not interfere any more, and I feel positive it will not interfere as much, with gestation, as the other methods which are being practiced to-day.

Dr. C. W. Bray, of Portland, opening the discussion, said :

*Mr. President and Gentlemen:*—I know little about this particular operation except having heard Dr. Cousins describe it. I agree with the essayist that ventral fixation is rather an unsatisfactory operation, and in two cases of my own which I recall, one was followed by autopsy and the other by a hysterectomy. In one of these cases, the cord was about two inches long and the intestine might have become caught and strangulated. I have never seen this operation performed, but I am interested in it, and think it will prove a satisfactory surgical procedure, and I shall certainly try it.

Dr. C. E. Williams, of Auburn, said :

*Mr. President and Fellows of the Academy:*—I, of course, have had no experience with this operation. It has always seemed to me that dragging on the ligaments would cause more pain and discomfort than from fixation. It also seems to me that a band of greater length would be better, in that the uterus would have freer movement and thus be more in a natural condition. Abdominal suspension would cause less pain, and, after a while, the band lengthening would give more freedom of movement and would put things in a more natural way.

Dr. W. K. Oakes, of Auburn, said :

*Fellow Members of the Academy:*—Dr. Webster, of Chicago, has performed an operation of his own originating several times, and it seems rational and satisfactory. After making an incision, he punctures the broad ligaments from the rear, grasps round ligaments about one inch from the uterus, pulls it through and stitches it with catgut. In this operation the uterus is held in a sling, and there is no cord or extra band, so that the

intestines might become strangulated. He has reported about seventy cases and claims excellent results.

I saw him perform this operation, which is somewhat similar to Dr. Cousins', only differing in cutting round ligament three inches from uterus and passing it through peritoneum, rectus and fascia over rectus and stitching cut end to fascia. Dr. Webster advocated this procedure only in women beyond the period of childbearing, and when uterus was small, for then, of course, the operation was easier.

Dr. S. C. Gordon, of Portland, said :

*Mr. President and Fellow Members:*—Of course all operations in which the round ligaments are utilized are modifications of Alexander's operation. He cuts down on the round ligaments, pulls them up and fastens them. This operation is attended by pain. Various modifications have been proposed by Drs. Mann, Dudley and others. It seems to me that Dr. Cousins' plan is an improvement on all of these, in that you bring the whole ligament up and stitch it, and you then have the whole round ligament pulling on all connected with it. We have always thought that Kelly's operation was radically wrong, in that it didn't leave the uterus in anything like a natural position, and yet we know, also, that some women, after this operation, have gone safely through labor. On the other hand, the books and journals are citing cases of trouble in labor after the uterus had been fixed to the abdominal wall. In these cases we sometimes get a cord three or four inches long, and the small intestine might get strangulated.

The prospect for this new operation seems to be good, for it takes the whole round ligament and fastens it so that it cannot stretch.

Dr. S. P. Warren, of Portland, said :

*Mr. President and Fellows of the Academy:*—It seems to me that this operation should be reserved for sterile women or those beyond the menopause, unless the ovaries are removed at the same time. The great danger in obstetrics is the excessive growth of the free sides of the uterus, and death has followed. It may be said that many women who have version and flexion will not become pregnant, but if the uterus is put in proper place to become pregnant, you are likely to get distortion of the uterus. Dickinson reports a death from this cause, and Dudley and others have called attention to this danger. As I understand this new procedure,

it aims to suspend the uterus from a higher point.

Dr. W. L. Cousins, of Portland, in closing the discussion, said :

Since making this operation on a new plan, one patient returned for examination, and I found the uterus in good position and freely movable. There was an absence of all symptoms for which she had come to me. Backache was gone, the dysmenorrhea was relieved, and there was cessation of the leucorrhea. Today a second case reported, and said she was perfectly well and would like to resume her work, which was waiting on table, in which she had to carry trays, etc.

In this operation there is no fixation of the uterus itself to the wall, and there is a space between the wall and the uterus. In Kelly's operation there is first a fixation to the abdominal wall in order secondarily to get a lengthening of the cord.

Dr. Warren says if this operation is done on women during child-bearing period the ovaries should be removed, but why, in that case, not insist also on removing the uterus and everything else, for then the uterus is only a foreign body. The operation of Webster, of Chicago, in some ways seems rational, but, if the uterus should become pregnant, we would expect to have retroflexion and difficulty in delivering.

The time is too short and the cases too few to determine the value of this procedure, but I shall be pleased to report results in the future.

An important point in my procedure is that I do not dissect out the round ligament, but grasp round ligament and the peritoneum of the broad ligament and draw the looped round ligament through the punctured wound and fasten it with catgut sutures to the external fascia of the rectus muscle.

### SOME PHASES OF QUACKERY.

By P. J. NOYES, of Lancaster, N. H.

[Continued from Last Week.]

**O**NE of the most extensively advertised, the most universally used, and one which has affected cures in cases "which all the doctors had given up," and when the patient had "become resigned to the inevitable, and was patiently waiting for the end," when, hearing of this "wonderful" medicine, "hope was revived," and the person is now living and well, and will never tire of sounding the

praises of the great "discoverer" to whom she or he is indebted for life and health.

Analyses reveals nothing of any value in this great remedy except *alcohol* and scullcap. This drug formerly had some reputation as a nervine, but its properties are so weak that it has fallen into disuse and dropped from the Pharmacopœia. When this "discovery" was first made it was recommended only to produce sleep and quiet the nerves, but the imagination of the "discoverer" developed with the growth of his wealth and now it is a specific for all ailments affecting the "heart, stomach, liver and kidneys." As a matter of fact this medicine is absolutely inert except the effect produced by the alcohol. And thousands of good people take it regularly who would resent with indignation any suggestion that a glass of whiskey daily would be much safer and produce far better results, besides being much more honest—that of doing openly what is now done under the disguise of a lying label.

It might be of interest to reproduce some of the testimonials which accompany the advertising of this nostrum, but they may be read in all of the papers embellished with the pictures of all kinds of grateful people.

Another of the popular remedies consists of alcohol and water—about 33% of alcohol and 320 drops of tincture of nux vomica to a pint bottle. This like all the rest is extolled as a wonderful product resulting from "years of study and research" by the happy discoverer. It cures every malady yet discovered, which is proven by the testimonials from the usual variety of "prominent and intelligent" people.

And so the whole long, nauseating list of this evidence of ignorance, assurance, cupidity and credulity might be gone through with, but it would simply be a repetition of what has already been said. Those that have been described are types of the whole with few exceptions.

Broadly speaking it is always a safe conclusion that *alcohol* is the only important constituent in any of the nostrums advertised to cure each and every disease, and if one desires to avail himself or herself of the virtues contained in any of these mixtures, it is more logical, more honest, safer and cheaper to get a bottle of good whiskey and take it instead.

Should the conscientious and well meaning druggist explain the composition of the mixture and the possible disastrous results following its use, the customer would see nothing but a "deep laid plot" to "substitute" some "worthless imitation for the original and

only genuine"—a *cent's worth of lead and sulphur*.

Another customer with a backache comes in for a bottle of the "great and only kidney cure." The druggist knows that a dollar bottle contains about  $\frac{1}{2}$  ounce of saltpetre, and nothing else of value, and his sense of honesty may impel a desire to expose the fraud, but should he do so, the only result would be a repetition of the above case, and experience has taught him to "keep his mouth shut."

As the physicians of the 17th century were forced to sacrifice intelligence to blind theological superstition, so today medical science is throttled by a superstition no less blind or unreasoning—but with this difference in favor of the former—then it was the result of honest conviction; now it is born of unscrupulous dishonesty, with a deliberate determination to induce disease for the profit there may be in it.

That the druggists of the country have submitted to this degradation is certainly not creditable, but that they have cannot be denied; as is evident from the attitude of the trade in regard to this part of their stock—in not only selling "what is called for" without comment, but by pushing their sale by advertising them at their own expense. It would be unjust to say there are no exceptions to this rule, for there are many druggists all over the country who do resent the dictations of quackery, by refusing to keep or sell any secret nostrums.

This essay has been drawn out to a length which was not contemplated when it was started, yet the barest outlines have been touched. To treat the subject exhaustively in all its bearings, and as its importance to social economies would demand, would fill a large volume.

The balance of the article will be devoted to that which will be of practical interest—the formulas of some of the leading advertised nostrums—and the ones which are having the largest sale at present. I have not trusted to my own analysis in most instances, but have taken that of the leading chemists of the country so they may be regarded as correct.

It will be noticed that the name of the preparations are not given, and this for the reason that it would serve no good purpose, and besides it would be invidious, as a description of one is practically that of nearly all secret medicines—certainly so as regards the discrepancy between the actual merit and the claims for the wonderful properties and miraculous results following their use.

In this description it would seem that the logical arrangement would be to commence at the *head*—that is with the "Vegetable Hair Restorers." These preparations are as far as I know a solution of acetate of lead and precipitated sulphur. These as is well known are advertised to restore the natural color of the hair, and to reproduce it even when the hair follicles are dead.

The philosophy or chemistry of the application of a solution of lead and sulphur is this:—when the mixture is applied to the hair and is exposed to the action of atmospheric oxygen, a chemical change takes place, resulting in the production of *sulphide of lead*, which is black and is deposited on the hair in very fine powder, simply coloring it the same as any other pigment, and must be renewed as often as it wears off. As for restoring hair on bald heads of course it never does. This is the "whole story" and between it and the extravagant claims of the manufacturers, the difference is very great. The chief danger of using these preparations is of lead poisoning, which is more than likely to result should the use be persisted in for any great length of time—the actual cost of a dollar bottle of this preparation is about five cents.

#### CATARRH REMEDIES.

The prevalence of this disease furnishes a prolific field for quackery. A remedy which probably enjoys the largest sale of any of its class, is of the following composition: A three ounce bottle contains 74 grains of Iodide Potass, in three ounces of Compound Tincture of Gentian. It sells at 75 cents per bottle. The same mixture can be obtained in any drug store for 25 cents—but the price is of secondary importance. Just why Iodide of Potass and Tincture Gentian should have such a miraculous effect it is hard to see. Yet a large reward is offered for any case of catarrh that this very wonderful remedy will not cure. Here is the explanation of the trick used in exploiting this preparation. The effect of Iodide on the system is often to produce *acne*, and in some conditions these skin eruptions become very severe and ulcerations result. This fact the quack takes advantage of by enforcing the idea that catarrh is a constitutional disease, and that when the eruptions appear the medicine is only "driving the poison out of the body." This is all so plausible that the sufferer contemplates a blotched face with the greatest complacency and satisfaction, seeing in the blemish the expulsion of the "pizen" in his system; when as a matter of fact he is



suffering from a real disease induced by the medicine, which he has been taking.

The following formulæ are types of the endless number of catarrh remedies with which the market is flooded:

Powdered Golden Seal,	1 ounce.
Powdered Borax,	10 grains.
Common Salt,	10 grains.

This sells for 50 cents a box, and costs about three cents.

Another one is

Borax,	1 ounce.
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This is placed in two boxes, with very minute directions to use one in the morning and the other at night. This sells for \$1.00 and costs about one cent.

Catarrh remedies have come into use in the past few years which have cocaine for the active constituent. These nostrums have achieved great popularity for the reason that cocaine not only affords immediate and grateful relief, but produces a feeling of buoyancy and exhilaration which is so delightful that the stuff soon comes to be used not merely for the relief of the catarrhal trouble, but for the feeling of exhilaration which it produces on the senses. It is quite safe to assume that a large majority of the victims of the cocaine habit have contracted it through the use of these nostrums.

There could be no better or more impressive illustration of the danger and the unqualified iniquity of quackery than that afforded by these cocaine preparations. The effect of the drug is so entrancing as to become irresistible. It produces a state of physical beatitude, of intense joyousness, a feeling of excessive strength, and a grateful sensation of relief from all the cares and burdens of life. But the penalty is in proportion to the excessive exaltation—that of the most extreme mental and physical prostration—a condition unendurable—bordering on insanity, and the only relief, resort to another dose of the drug.

The victim of the cocaine habit becomes a physical and mental wreck, a moral pervert, as irresponsible as an inmate of an insane asylum.

The man who will deliberately put up under a secret misleading name, and offer for sale a drug of so diabolical a nature, and the man who will sell it, knowing what it is, without at least giving the person due warning of the danger, is guilty of a crime hardly short of deliberate murder.

Yet the country is flooded with literature bearing the endorsement and testimonials of prominent men and women—lawyers, clergy-

men, teachers and all kinds of people occupying influential positions telling what "wonders the *marvel* has done for them," and advising sufferers to follow their example—leading them to a peril in which may be involved a life of misery.

While on the subject of *Cocaine* it may not be a digression to refer to a notable example of the unscrupulous and criminal use of dangerous drugs. One of the innumerable "greatest discoveries of the age," materialized some years since under the euphonious name of "*Vita Nuova*." It was modestly described as a "life giving and health renewing cordial and tonic, unsurpassed in excellence as a restorative, effecting marvelous cures in all cases of mental exhaustion, general debility, nervous prostration, insomnia, dyspepsia, hysteria in its many forms, neuralgia and congestive headaches," etc., etc. Also recommended as a positive cure for the "opium and alcohol habits." The circular accompanying it makes the specific statement that "though tasting like old wine 30 years old it is positively free from alcohol or narcotics. It creates no craving and can be left off at any moment without the slightest desire for it."

The analysis of this nostrum disclosed the fact that it was a cheap wine containing 19 1-2 per cent. of alcohol and a large quantity of cocaine. The usual quack methods were resorted to make the stuff sell, and the one thing that signals this fraud out from its associates is the character and eminence of the men who endorsed and recommended it to "suffering humanity."

Among them were a college president, several college professors, a railroad president, two bishops, a judge of the supreme court, and others of lesser note. (In the fact that the proprietor of this wonderful specific was a very beautiful woman, the uncharitable might see some significance for the endorsement of so many men of high standing, who professed to receive so much relief and pleasure in the use of the medicine.) It of course attained an enormous sale, and the proprietor was flooded with letters from grateful people who had been "snatched from an untimely grave." But it collapsed all at once.

Dr. Eccles, of New York, happened to analyze the compound and discover its dangerous character. It was at once exposed through some of the journals, and the collapse followed. But the evil that had been accomplished can never be known, but that it was most serious and far reaching there can not be the slightest doubt.

The robber who breaks into a house and steals is punished. The poor man who steals a loaf of bread to keep his children from starving, is sent to jail. The person who takes another's life deliberately, pays the penalty with his own life, but he who takes advantage of the credulity and ignorance of his fellows, to rob them of their money, and their health, or reduce them to a state of moral and mental slavery, worse than death, is not punished, but receives the plaudits of the public and is helped in his nefarious trade by those who arrogate to themselves superior greatness and goodness, and assume to be the models for the aspirations of common humanity—and we boast of our superior knowledge and civilization!

#### COUGH REMEDIES.

These remedies are very simple, being composed of Wild Cherry, Tulu, Ipecac, Squills, Senega, Lobelia, etc., with *Morphine*. It is probably safe to say that all of the most popular cough preparations contain opium in some form on which their popularity mainly depends. Opium has the effect to allay a cough the same as it allays pain, but it does not cure, and is of course dangerous to use as the morphine habit may be induced, and is as a matter of fact, more frequently than is known.

They contain the equivalent of from 1-20 to 1-8 grain of morphine to a dose. No careful physician would administer morphine in this reckless way, and every "cough cure" should be carefully scrutinized and the absence of morphine assured before taking it—and especially before giving to children.

Below is the formula of a famous "consumption cure" which is a fair type of all such cures:—

Tincture Tolu,	1-2 ounce.
Fld. Ext. Lobelia,	2 drachms.
Fld. Ext. Cannabis Indica,	2 drachms.
Chloroform,	1 drachm.
Sulphate Morphine,	4 grains.
Tartar Emetic,	4 grains.
Ess. Spearmint,	10 drops.
Water,	8 ounces.
Sugar,	14 ounces.

This is recommended as a *positive cure* for consumption, and the advertising literature is accompanied by the usual testimonials from thousands of people who have been "cured" by its use.

Here is another "consumption cure."

Morphine,	3 grains.
Muriatic Acid,	3 minims.
Fluid Ext. Henbane,	2 fl. dr.

Fluid Ext. Ginger,	8 fl. dr.
Fluid Ext. Wild Cherry,	3 fl. dr.
Chloroform,	1 fl. dr.
Dil. Alcohol,	8 fl. dr.
Ess. Peppermint,	30 minims.
Syrup Tar,	8 fl. oz.
Simple syrup to make 8 fl. oz.	

The recommendation reads as follows:—"is warranted to cure consumption, coughs, colds, croup, hoarseness, asthma and all lung diseases. No cure, no pay." The only thing in this from which any appreciable effect could be expected is the morphine, and it cannot be repeated too often or with too much emphasis that *morphine* should never be taken except under the most rigid surveillance of a careful physician.

There is no suggestion intended in this that resort to a stimulant of any kind is advisable without the advice of a physician—far from it—but without minimizing the evils of the drink habit in the least, the assertion that it is an evil of secondary importance when compared with the quack medicine evil, it is a proposition hardly questioned when all the facts are known and realized.

It may be said of alcohol, that it is an absolute necessity—the arts and sciences could not be developed or exist without it, and its annihilation would mean the end of civilization, as we now know it, and the man who would advocate the destruction of alcohol would be a menace to society, had he the intelligence to give his fanatical vagaries adequate force—But not one word can be said in favor of the quack medicine industry—It costs the people of the country millions upon millions annually, is the direct and immediate cause of an appalling amount of mental suffering, is responsible for a great share of chronic illness through the effect of the mind over organic functions. It shortens the mean duration of life, both by direct effect and preventing proper medical treatment, perpetuates and induces the same old superstitious faith in the marvelous which has ever been a bar to progress, and makes possible the development and existence of all the long list of unintelligent fantastic, grotesque, dangerous "systems" of healing with which the country is cursed today.

Will this condition of things ever be changed? Not so long as men will barter in the blood and lives of their fellows; not so long as people refrain from giving the same careful thought, and exercise the same judgment, in a matter which would seem to be of the first importance, health and life—that they do in the ordinary affairs of life; not so long as influential men and women, judges,

lawyers, members of Congress, ministers and women prominent in great "reform" movements become parties to a fraudulent business, by aiding it with testimonials and recommendations. In a word, not until education in its widest sense becomes universal—that is, education based on the physical sciences the great underlying law of evolution, the unity and eternity of force and matter, the cellular structure of organic life, cosmogony, biology, etc. Instead of this rational foundation it must be confessed that education is still dominated by the traditional dogma of the middle ages, where reason must prostrate itself before a "higher revelation" and as a result our intellectual and social condition is none too severely characterized by Mr. Alfred Wallace: "Compared with our astounding progress in physical science and its practical application, our system of government, of administrative justice, and of national education and our entire social and moral organization remain in a state of barbarism."

#### Some Unsolved Problems in Tenement-House Life.\*

By S. A. KNOFF, M. D., New York.

*Mr. Chairman, Ladies and Gentlemen:*

**A** NEW era has dawned on several of our large cities and on our tenement-house population. Chicago has its City Homes Association, Greater New York for the first time in its history has a single Tenement House Commissioner, Mr. Robert W. De Forest, who has done so much for the improvement of the condition of the tenement dwellers by his previous work, has with a rare self-abnegation accepted the position tendered to him by His Honor the Mayor. Let us rejoice at this appointment of ideal excellence, and let us also be grateful that Mr. De Forest has for his lieutenant our esteemed friend and indefatigable worker in tenement-house reform, Mr. Lawrence Veiller.

Thanks to the labor of the Tenement-house Commission, which was appointed by our honored President when still Governor of New York, and thanks to our present tenement-house laws which this Commission has promulgated, Mr. De Forest and his staff will be able to see to it that our tene-

ment-house dwellers shall have safe and sanitary habitations. Rooms without light and air will be a thing of the past; houses with insufficient and dilapidated fire-escapes will no longer be tolerated. A pure atmosphere in every respect will prevail in these homes for toilers. But there still remain a few problems on the tenement-house question unsolved. They are such that the commissioner cannot reach them and are in reality beyond his province. They must be solved by private enterprise and by personal work, such as you, charity workers and friendly visitors to the poor, are doing daily. You must, however, also be helped in these labors of love by large and generous philanthropy on the part of the well-to-do.

The unsolved problems are, first, ignorance concerning personal hygiene, food and cooking; second, alcoholism; third, tuberculosis; fourth, the inability to get along with their earnings.

In a short address like this I can, of course, not go into the details of personal hygiene, and can only point out to you some of the essentials which the majority of the tenement-house dwellers do not know, or think they need not know nor practice. There is first the question of baths. Many people, having no bathrooms, think they do not need to take baths, particularly are they opposed to taking cold douches, which are so essential to good health. Let me give you a few details of the procedures to accustom people to the use of cold water when they are afraid of it. Tell them to be rubbed off, or to rub themselves off, for a few days with pure alcohol all over the body. For the next few days to take half alcohol and half water instead of pure alcohol, and lastly use cold water alone. After having become thoroughly accustomed to the friction by hand with cold water let them gradually commence with a sponge bath, later the abolition, and lastly the douche. By this education of the skin and the nervous system there is nothing to be feared from the shock which cold water may produce. It is well to tell people not to take their douches in cold chilly rooms, and always to follow the cold douche either by exercise or a return to the warm bed if the douche is taken in the morning.

When ordering baths to the tenement-house population it is not unusual to be told that there is no bath-room. You must then assure these people that by buying an English bathtub, about a foot deep and three feet in diameter, one can, with the help of a few pitcherfuls of water poured over the

\*Address delivered by invitation before the Second Public Conference of the Friendly Visitors of the Brooklyn Bureau of Charities, at the Church of the Messiah, Brooklyn, N. Y.

shoulders of the individual, improvise a very effective douche. By the use of a watering-pot with sprinkler an almost perfect needle bath can be improvised. Besides the daily douches one should recommend a weekly warm bath with soap, to be taken either in a public bath house, in their own bath-rooms, or with the aid of a tub. These warm baths should be followed by a cold douche or a rapid cold sponging off. The use of water, cold and warm, in this way will not only strengthen and improve the general condition of the tenement dweller, but will also prevent him from becoming susceptible to the various infectious and debilitating diseases.

Concerning dress there is one habit which I have found prevalent among our tenement-house population and also among more well-to-do people, that is sleeping with underwear, which is never taken off until the end of the week, and sometimes not even then. Now there is nothing more unhygienic and nothing more productive of skin diseases, so frequent among the poor, than just such habits. The healthiest way is, of course, to sleep in a muslin nightshirt, which should be well aired during the day time. Some people, however, claim to be cold unless they wear undergarments at night. To these one must recommend to have two sets of underwear, one to wear at night, and the other during the day time.

Another defect in personal hygiene is the common use of one towel for the whole family. This habit is particularly to be regretted since it is known to all medical men of experience that a number of diseases have been transmitted through the medium of a towel. One cannot insist too much upon this point and recommend that every member of the family should have his own towel and tooth-brush.

Of dress in general I have little to say except to urge upon you, women who work among your sisters of the tenement, to teach by example and practice, that a short skirt is more convenient than a long one; that a comfortable waist to which the skirts are attached is more hygienic than that little instrument of torture called the corset, and a half dozen skirts tied tightly around the waist.

The children of the poor who are not kept clean and taught cleanly habits at home, must be educated to the love of cleanliness in schools, public kindergartens, settlements, etc. Whether you can induce the men not to impoverish the atmosphere of their little homes with the use of tobacco indoors, will

largely depend upon your tact as well upon the individual you have to deal with. Men are sometimes selfish and think that in their own homes they can do as they please, and chew and smoke to their heart's content without regard to the health of their wives and children.

In the equipment of the rooms of the tenement dwellers there is, of course, a great diversity. I have seen the most tidy, cleanly and hygienic arrangements in the dwellings of the poor, but, on the other hand, misery and indifference have often created conditions in such rooms that made them scarcely resemble habitations of human beings. You have seen them as well as I. One is sometimes amazed at the accumulation of dirt and filth and is often tempted to call in the health department to disinfect and fumigate at once. The first thing these people must be taught is a love for fresh air, and that it is as essential to air the bed clothes as to care for their own person. If carpets are nailed down on the floor tell them to take them up and clean the floor with a moist rag. Urge them never to use carpets again, but to content themselves with rugs if they wish to have something on the floor. These people must be impressed with the idea that all accumulations of dirt and filth breed disease.

Before leaving the subject of the interior arrangement of the tenement home, permit me to draw your attention to another feature, namely the habit of several people sleeping in one bed. I have known of instances where four or five persons have slept in one so-called large bed. Leaving aside all moral considerations this is unhygienic from every point of view. One should encourage these people to the use of single beds or cots, and if possible to give every member of the family his own bed.

The question of food is most serious among the tenement dwellers, yet it would be wrong to say that want of money is always the cause of malnutrition among this class of people. Permit me to say here, what I have said on a previous occasion, that I know there is more waste in households among some of the poor families than in the well-to-do. This waste is due to the ignorance of the poor woman who does not know how to cook and economize. To make a good, plain, healthy and tasteful meal, with relatively little expense, is an art which must be taught to the young woman leaving the factory or the position in the store to enter upon the duties of a housewife. Here is a field for noble-minded and experienced women who have made the art of cooking a study. By imparting their

experience to their less fortunate sisters, they will make a new household lastingly happy. I am convinced that badly cooked food, unappetizingly served, is in many cases an inducement for the laboring man to leave his home and seek compensation in drink. If instead of a plate of good, warm soup, well steamed vegetables, and appetizingly prepared meat, some cold product from the delicatessen store is placed before him after a day of hard labor, it is natural that he should feel the need of stimulation which he seeks in the saloon.

The subject of alcoholism is most important. Fanatical reform movements will never be able to combat this evil. Education and example will certainly do more. From early childhood the dangers of intemperance and its fearful consequences should be taught. In schools and at home the drunkard should be pictured as the most unhappy of mortals. While the very moderate use of feeble alcoholic drinks, such as light beers, may be considered as harmless to adults when taken with their meals, alcohol should never be given children even in the smallest quantities.

In families where there is a fear of hereditary transmission of the desire for strong drink, even the mildest alcoholic drinks should be avoided. It would also be best if all people so predisposed, or who may have acquired only the occasional desire for drink, would never smoke, for experience has taught that attacks of dipsomania (periodical sprees) are often caused by an excessive use of tobacco. The young man starting out in life should take with him the moral training which will enable him to be a gentleman, and be considered a polite gentleman, though he absolutely refuses to ever enter a liquor saloon in order to treat or be treated to drink. It is this treating habit alas! so prevalent in our American society, which has ruined many a young man and made him a moral and physical wreck. The creation of tea and coffee houses where warm non-alcoholic drinks, including bouillion, are sold in winter and cool ones in summer, is to be encouraged. It would be of additional advantage if some of these houses would also offer healthful amusements for old and young. Temperance societies, which through intelligent propaganda help to combat the fearful evil of alcoholism, should receive encouragement from everybody. Do what you can, ladies, in working against this curse of our country, in this or similar ways.

Alcoholism leads us to tuberculosis, for I

do not believe that there is a more potent factor in the production of consumption than alcoholism. The children of alcoholics are very often doomed to tuberculosis, and if they have inherited in addition the love for strong liquor their lives are doomed. In one of the French sanatoria for tuberculous and scrofulous children, where it was my privilege to work for some time as assistant physician, the statistics showed that of the little inmates about 25 per cent. had alcoholic parents. Other recently published French statistics show that where the annual consumption of alcohol per head is 6 pints, only 30 to 40 in 10,000 inhabitants die from tuberculosis, but in localities where the people consume 25 pints per head per year, more than 90 out of every 10,000 inhabitants die from this disease. The excessive use of alcohol undermines the constitution and thus prepares the field for the invasion of the tubercle bacilli. The drunkard when married will spend more money for liquor than he will give to his family for food. Thus wife and children will be underfed and become subject to that disease which singles out the weaklings, the debilitated, and the badly nourished.

Consumption is a communicable, preventable and curable affliction. There has been of late much discussion because of the declaration of the Treasury Department that tuberculosis is a dangerous contagious disease. As a consequence of this decision all visitors and immigrants, rich and poor, afflicted with tuberculosis, must be excluded from this country. Prominent physicians, such as Professors Prudden, Biggs and Janeway, of New York, have declared this action not based on scientific principles, and Doctor Biggs pronounced it unwise, unjust and inhumane. I heartily endorse the opinion of my eminent friend, and have expressed my views on this subject in a recent paper read at the Academy of Medicine, entitled "Public and Private Phthisiophobia," that is to say, exaggerated fear of the vicinity of consumptives. In a lay audience it is essential to avoid medical terms which may lead to a misunderstanding. Permit me, therefore, to give you a definition of what is meant by the terms communicable and contagious. The great danger from infection in tuberculosis lies in the indiscriminate deposit of sputum containing the bacilli, which, when dry and pulverized, may be inhaled by susceptible individuals and then cause the disease to be developed. The communication of the germ of tuberculosis is, how-

ever, less obscure to us in its process, and far more easily guarded against than the contagion arising from such maladies as diphtheria, scarlet fever, smallpox or yellow fever. To be in contact with a consumptive who takes care of expectoration and other secretions which may contain the bacilli, is not dangerous. This cannot be said of smallpox or yellow fever. Herein lies the difference between communicable and contagious.

What can you, friendly visitors and charity workers, do toward helping to solve the tuberculosis problem? The first thing that I would advise you to do is to protect yourself, not by becoming a phthisiophobic, that is to say, afraid to go near a consumptive, but by making yourself strong and vigorous, so that, if you do happen to inhale a few bacilli, they may not do you harm. For you must know that the nasal secretions, as well as the blood, are bactericidal, that is to say, certain cells contained in the healthy blood and healthy nasal secretions are stronger than the little bacilli and do away with them by simply swallowing them. The scientific name for this process of destruction of the germs is phagocytosis.

Having kept yourself strong and vigorous, what can you do in your work among the tuberculous in the tenement-house districts? You should first make yourself acquainted with the two sources of infection; the one coming from the dried tuberculous expectoration has already been mentioned, and the remedy is the use of well kept spittoons and pocket flasks and the strict order to the patient never to expectorate anywhere than in those vessels. This, you must tell him, he has to do as much for his own protection as for the protection of others. You must tell him that if he should re-inhale the pulverized dust of his expectoration he would re-infect himself and make his condition more serious. Tell him also that he must always have two handkerchiefs with him, one to use to wipe his mouth after expectorating, and the other for his nose. Kissing on the mouth should be discouraged in a family where there is a consumptive. If the patient is helpless so that he cannot use either his pocket flask or the ordinary spittoon, moist rags should be near his bed and used to receive the expectoration. They should be burned before they have a chance to dry. Tell the people who attend to the cleaning of the spittoon to be careful if they have any scratches on their hands not to soil them with matter from the spittoon. They should be particularly care-

ful with nicked glass or porcelain spittoons. If one has been unfortunate enough to receive an injury and tuberculous inoculation is feared, the best thing to do is to let the wound freely bleed, wash it thoroughly with water that has been boiled, with a five-per-cent. solution of carbolic acid, or with pure alcohol; dress the wound with a clean rag dipped in any of these liquids, and seek as soon as possible the advice of the physician.

There is one source of infection little known, which you, visitors of the tenement houses, should be acquainted with. This is what we call drop infection. During the so-called dry cough, excited speaking or sneezing, small particles of saliva are expelled from the mouth and nose which may contain the bacilli. At a distance of three feet these drops fall to the ground. To guard against the danger of this sort of infection you should not approach the patient unnecessarily near for any length of time, and you should always insist that the patient holds a handkerchief before his mouth while he coughs. Incidentally I should also like to mention that the so-called dry cough is with great many people a matter of habit. They have a slight tickling sensation in the throat, and in order to relieve it, cough and make the irritation worse. Discipline in such cases has often cured the cough.

While there is relatively little danger of infection from tuberculous meat, since diseased meat is destroyed by the inspectors at our slaughter houses, there is danger from tuberculous milk, and you should advise mothers in the tenements to boil or sterilize all milk before giving it to the children.

With this knowledge of the prevention of tuberculosis, what can you do toward its cure? The ideal solution of this problem would be that at the moment you discover a tuberculous man, woman or child in the tenement districts you should be able to recommend the immediate removal to a sanatorium where the patient has the best possible chance of becoming cured. Even the best kept tenement home is not a good place for a consumptive, and if the home of such an unfortunate one is ill kept, badly ventilated, dark and dreary, it is the saddest place to be. Deprived not only of the many hygienic and dietetic agents whereby we nowadays treat and cure this class of patients, but lacking perhaps the very essentials to sustain life, the poor consumptive of the tenement is doomed to a certain and lingering death.

You must interest all your friends who



can and are willing to help to assist our state and city authorities to create a sufficient number of sanatoria for the consumptive poor adult, and enough seaside sanatoria for the tuberculous and scrofulous children.

In the meantime, when you visit a consumptive, besides inaugurating the above mentioned preventive measures, impress upon the patient, his family and friends, that fresh, pure air all the time is almost a specific for the disease. To keep the window open, twenty-four hours of the day, winter or summer, rain or shine, is the first requisite for a consumptive. The next thing you must do after your visit, is to get a doctor, if the patient has not yet a medical attendant. Then combine your forces with the doctor and see what you can do in the provision of good food and in arranging as far as possible a sanatorium treatment at home. More you cannot do, except perhaps, to ask the doctor if he would not be good enough to examine occasionally also the other members of the family to determine whether some infection has taken place. By the discovery of an early case, and the immediate inauguration of treatment, you may thus be sure to have saved at least one life, if you have been called too late to save the other.

We have spoken of ignorance concerning personal hygiene, food and cooking; we have mentioned alcoholism and tuberculosis; it remains now for us to say a few words on that other problem of the tenement dweller—inability of the many to get along with their earnings. Besides alcoholism and disease, which make the poor very much poorer, there is often the expense of rent which takes far too great a portion of the earnings of the laborer.

This problem, ladies and gentlemen, you will probably not be able to solve alone. It is a social problem, and we can only partially solve it by appealing to our generous fellow citizens, who have given millions for churches, colleges, libraries, to help us now to get enough model tenement houses where the average wage earner may, for a modest sum, have a cheery, healthy home. Rents are too high in our cities. The poor pay relatively higher rent than the wealthy. Let our great lovers of mankind direct their gifts in this direction. Let them create cheery, pleasant and healthy homes for laborers' families, at reasonable rents. There will be, as a consequence, less misery, less crime, less disease, and our tenement-house problem will be ultimately solved in all its aspects.

## A Practical Method of Controlling Nasal and Uterine Hemorrhages.

By E. GARD EDWARDS, M. D., South Norridgewock, Me.

Suprarenal Extract has been of signal service to me in a number of cases, two of which I deem worthy of consideration, especially by the general practitioner, who may be able to utilize the results of my experience on some future occasion.

Case 1 occurred in a plethoric but remarkably healthy woman, 68 years of age, who was seized with a very violent attack of nose-bleed. After the hemorrhage had continued for three hours she sent for her physician, who swabbed out the anterior naris with Monsell's solution, packed it with cotton, and administered ergot and bromides internally. Although this procedure apparently controlled the hemorrhage, there was still a continuous oozing of blood from the nostril.

Twenty-four hours later I saw the case. Upon removing the tampon the blood flowed as freely, according to the patient's statement, as at the beginning of the attack. An examination showed that the hemorrhage was coming from the anterior third of the cavity, well up towards the middle meatus.

Ice was applied to the neck and injections of hot water were used to control the bleeding; finally the nasal chamber was tamponed with gauze soaked in a three per cent. solution of antipyrin, and latterly with a solution of tannic acid; atropine and ergotine were administered hypodermically. This method of treatment having proved unavailing, Suprarenal Liquid with Chloretone was sprayed into the nares with very perceptible effect. More of the same preparation was applied upon a swab, with the result that after the lapse of three hours there was no return of the capillary oozing. To make assurance doubly sure, as the patient lived some fourteen miles from my office, the anterior and posterior nares were plugged with plain gauze. Upon its removal the following day, hemorrhage did not occur.

Case 2 was one of climacteric hemorrhage in a woman 42 years of age. There was chronic subinvolution of the uterus with a prolapsus which was easily controlled by the application of a pessary. There was also an enlarged right tube and ovary, but no other pathological condition was discovered by myself or the consultant.

When I was called to see this patient the hemorrhage had been continuous for seven days. I prescribed drachm doses of fluid extract of ergot every four hours, and ap-

plied a vaginal tampon. This line of treatment was persistently carried out for two days, with little improvement in the woman's condition. Then I prescribed fluid extract of ergot, one-half drachm; fluid extract of hydrastis, one-half drachm, every four hours, and digitalin 1-32 grain, every four hours. The uterine cavity was mopped with tincture of iodine, the cervix was plugged, and a vaginal tampon applied and left *in situ* for two days longer, with unsatisfactory results. I then ordered ergotine, 2 grains; hydrastin, 1 grain; gallic acid, 10 grains, every three hours, and repeated the local treatment just described, with the omission of the cervical packing, and waited two days. At the expiration of that time there was a slight improvement. To meet the constitutional symptoms atropine was prescribed, with the oil of cinnamon, and the local treatment was continued for thirty-six hours longer, when I was satisfied that there was really no improvement in the state of the case. At this juncture I prescribed the Solution Adrenalin Chloride (1-1000), in 15-drop doses every four hours, and applied a vaginal tampon. In twenty-four hours I was rewarded by finding a complete cessation of the flow. The use of the Adrenalin Solution was continued for twenty-four hours longer, with hot-water douches, when I had no further trouble with the case.

## THE NEW YORK ACADEMY OF MEDICINE.

### Section on Orthopaedic Surgery.

(Meeting of Dec. 20, 1901.)

GEORGE R. ELLIOTT, M. D., Chairman.

Dr. Royal Whitman presented a child 21 months old, suffering from a condition which had at first been mistaken and treated as tuberculous disease of the knee joint. The particular interest lay in the fact that it was rheumatoid arthritis; the mistake was not uncommon when the larger joints alone were affected, as the signs were similar in the early stage. At present, both knees are involved, also a wrist, ankle and the fingers. The case was presented first, because rheumatoid arthritis was rare in young children, and to call attention to a common error in diagnosis.

#### TORTICOLLIS.

Dr. Whitman presented a patient showing the ordinary treatment of confirmed torticollis. The permanency of the cure was the especial point to be noted. The treatment

was by the open method of complete division of all the contracted tissues, over-correction of the deformity and fixation for several weeks in plaster of Paris. The advantage of a thorough operation was the ability to dispense with apparatus, while after the subcutaneous method apparatus was often necessary, because not always possible to completely overcome all deformity. The case showed to a moderate degree hemi-atrophy of the face which was very marked in some instances.

#### RADICAL TREATMENT OF CLUB-FOOT.

Dr. Whitman also showed the result of radical treatment of club-foot in a child eight years of age. One foot had been cured by the ordinary means in early life; the other foot was operated upon July last. The foot that recovered first was much larger than the other, an illustration of the effect of deformity in retarding development. He considered the Phelps open operation the best of the more radical operations for the ordinary club-foot of childhood and adolescence, the advantage being that the inner border of the foot was lengthened instead of the outer side being shortened, as was the case in certain operations on the bones. This patient was not confined to the bed for more than one week; after that it was allowed to walk about on the plaster of Paris bandage.

Dr. V. P. Gidney asked Dr. Whitman if the occurrence of rheumatoid arthritis in young children was frequent in the literature.

Dr. Whitman replied that he had not investigated the statistics on the subject, but that he had seen several cases in his practice and would judge that it was not exceedingly uncommon in early life.

Dr. W. R. Townsend said, in referring to the case of torticollis operated upon by Dr. Whitman, that he could not agree with Dr. Whitman as to the disappearance of the scar. He had seen many of these scars which looked well shortly after operation, yet had a tendency to grow more unsightly; he had even known keloid to develop. He thought that, at all events, patients should be warned of the possibility of a scar remaining.

Dr. Homer Gibney stated that he had seen a number of cases treated by both methods, open and subcutaneous. He had seen several scars disappear in young children. He considered the subcutaneous method the safest except in very severe cases.

Dr. T. Halsted Myers said a transverse incision would give the same exposure of the operative field and would enable the deformity of the scar to be better concealed.

Dr. Whitman had had no experience with keloid developing late in the scars; if such appeared it was usually within a few months after operation, he thought. He stated it as his experience that the scars practically disappeared.

#### EXTREME DEFORMITY OF RICKETS.

D. V. P. Gibney presented two cases showing extreme deformity of rickets. The upper arms, back and legs were involved in one case, giving the typical deformity of the disease. The second patient showed the lateral spinal curvature, the typical deformity of the thorax, beaded ribs, also deformity of the legs and arms. Both were being treated in the Bradford frame, made convex in conjunction with general constitutional treatment.

#### CLUB-FOOT SHOE.

Dr. Gibney also presented a patient wearing a club-foot brace, seen in Hartford and used by Dr. Cook as a modification of Taylor's club-foot shoe. In private practice, he had been able with this apparatus to control some of the most obstinate cases. In the patient presented, treatment was begun when the patient was six weeks old. Several forms of apparatus had been used from time to time, but relapse had occurred. At present, after wearing the modified shoe, the child holds her foot in perfect position and walks without deformity. The apparatus is a good retentive one, though it does not take the place of operation.

#### TALIPES EQUINO VARUS.

Another case of a child 21 months old was also shown by Dr. Gibney with talipes equino varus. The deformity was extreme and was corrected under an anæsthetic and various methods had been employed; the last time it was seen it presented the typical "reel foot." It was thought that if the head of the astragalus could be removed, the fascia divided and the foot replaced a cure could be effected. A relapse occurred after six to eight months. Under anæsthesia the foot was forcibly put in calcaneo valgus. Later, a club-foot spring, with pelvic band, was put on and served fairly well except that two sets of apparatus had to be kept on hand. Finally the modified braces were used successfully.

#### CASE FOR DIAGNOSIS.

Dr. Gibney also presented a boy 11 years old for diagnosis. He came to the hospital some months ago with the history of an injury four weeks previous, having fallen, striking his hip. He got up and limped about, but the next night could not sleep; he had

fever with delirium. On admission to hospital, he walked with thigh flexed on pelvis, had little fever and complained of pain in the hip extending to the knee. He was thought to have hip disease, and was treated with pulley in bed. After three weeks, the angle of extension was 110 degrees, flexion normal, practically no pain on pressure. There was no apparent abscess and the spinal column was not involved. The diagnosis became doubtful. In October fluctuation was thought to be detected under the vastus externus. Incision was negative. The original diagnosis was finally abandoned and the case was considered one of peri-arthritis.

Dr. Myers asked Dr. Gibney what would be his prognosis in the case of the spinal curvature in the rickety patient.

Dr. Whitman stated in reference to the case of rickets, that when the patient entered the hospital the spinal deformity was thought to be the most serious of the distortions, and that for that reason the patient was placed on the frame.

Dr. Gibney said that Dr. Whitman had partly answered the question of prognosis. He thought the child should be kept in over-extension for a while longer, and that after that a brace would keep the spine in place, and as the child developed the deformity would be in a measure outgrown. He considered the cases easy to manage so long as they could be kept under observation in a hospital; outside, the prognosis was not so good; no manual force had been applied to these cases yet.

Dr. A. B. Judson suggested that while the children were being kept on the frame would be a good time to give mechanical treatment to the lower limbs.

Dr. Gibney considered the suggestion a good one and would adopt it.

Dr. S. A. Twinch asked what dietetic treatment was adopted.

Dr. Gibney stated that no scientific feeding was followed. Milk and cod liver oil were given, sometimes iron. The object had been simply to keep the children well nourished.

Dr. Judson said that the club-foot shoe that was shown seemed more like a modified Taylor brace. It was evidently an effective apparatus. He noticed the absence of an ankle joint, which was very properly omitted, as better leverage was thus obtained, and there was no good reason for the fear that want of motion in the brace would impair ultimate motion in the ankle.

Dr. Myers asked Dr. Gibney his opinion of tuberculin injection for diagnosis.

Dr. Gibney stated that he had not made use of these injection tests recently.

He cited a case at St. Luke's hospital (the first case tried there), where several lesions developed after the injections, which some years have been required to relieve.

Dr. Townsend said that at a symposium on tuberculosis, recently held under the auspices of the New York County Medical Association, Dr. DeSchweinitz and others discussed the tuberculin test at length. The consensus of opinion as expressed by the men present was that, as a test for tuberculosis, its value was doubtful, and that the injections were innocuous.

#### INCIPIENT HIP DISEASE—RECOVERY.

Dr. A. B. Judson presented a girl, 8 years old, who had been before the section on Nov. 16, 1900. At that time the history of left hip disease, covering twelve weeks, had included inconstant lameness, knee pain and reflex, night cries, muscular atrophy and limitation of motion. A steel crutch and high shoe had been worn from November, 1900, to November, 1901. Recovery had been so complete that the only traces were  $\frac{3}{4}$ -inch shortening and  $\frac{1}{2}$ -inch muscular atrophy. The case illustrated the importance of early diagnosis. Traction and immobilization had not been sought. Recovery visited the limb freed from the weight of the body by being made pendant. In this artificial environment the focus was quenched which otherwise would have broken into flame.

#### A DEVICE FOR DEFORMITIES OF THE KNEE.

Dr. Judson presented a girl, 10 years old, wearing a device useful in deformities of the knee. The patient was Case III, White Swelling of the knee, presented to the Section Oct. 20, 1899. The problem was to prevent the fixative brace from seeking the inner side, where it caused knock-knee, and to keep it behind, to oppose flexion. The brace was made of one piece, with the shoe in such a way that when the shoe was on the brace would be in the proper place. A light steel bar extended up the leg and was fastened to the upright part of the brace by a sliding ring keeper. Its lower part, bent at a right angle, was screwed to the under side of the heel of the shoe at an angle to secure the effect desired, keeping the brace behind to oppose flexion, or to the outer side to oppose knock-knee.

#### SOFTENING OF THE TIBIA.

Dr. J. P. Fiske presented a case of localized softening of the tibia at the age of adolescence. The patient, a girl, now 14 years

of age, was first seen in 1898, when she complained of localized pain in the lower part of the leg, well above the ankle joint, thought to be a referred pain due to improper gait. A strap bound around the part brought no relief. The curve at the lower part of the tibia increased. At this time a positive diagnosis of tuberculous disease was made by a distinguished consultant and fixation advised; plaster splint was worn for six months. At the end of that time, the leg was in the same condition except atrophy, but measurements showed that the tibial curve had increased. Two months later, exploratory incision revealed negative results. February, 1901, an osteotomy was performed in the lower quarter of the tibia, the fibula shortened  $\frac{1}{2}$  inch, the deformity corrected and leg put up in plaster. Ten days after the operation, the patient was fitted with an ambulant splint, and six weeks later walked without the apparatus. Since then there have been no symptoms. The diagnosis of softening of the lower part of the tibia seems to have been the proper one. There is no difference in the length of the tibiae.

#### CONGENITAL DEFICIENCIES.

A second patient presented by Dr. Fiske was one of congenital absence of fibulae and outer side of foot, with equinus. The patient was seen at the age of 1 year. The fibulae and several of the metatarsal bones were absent, also the heel was undeveloped. An osteotomy was performed at once with tenotomy on the tendon Achilles, the position of the feet corrected. At present, child is able to go about with a light brace.

Dr. George R. Elliott asked Dr. Fiske what kind of softening was present in the lower third of the tibia in the patient he presented.

Dr. Fiske stated that he had not reached any definite conclusion. He saw no reason why it should not be included in the same class with softening of the neck of the femur occurring at the age of adolescence. It might possibly be due to some error in development, and, in part, to the weight of the patient.

#### DOUBLE CONGENITAL CLUB-FOOT.

Dr. Leonard W. Ely presented a patient 1 year old, showing result of treatment for double congenital club-foot. The point of interest was that the right foot was treated uninterruptedly with a brace and the left with plaster of Paris. In contradiction to the general idea that plaster of Paris causes atrophy, the right leg was shown to be much smaller than the left.

## TENDON TRANSPLANTATION.

Dr. R. A. Hibbs showed the result of tendon transplantation done in July, 1901, for paralysis of the tibialis anticus muscle. The extensor proprius hallucis was inserted into the periosteum of the scaphoid, and its distal end into the first division of the common extensus. The patient (21 years) exercised a good deal of intelligence in perfecting the action of the muscle with its new attachment. The foot had been in a position of marked valgus, with the scaphoid very prominent. The deformity was completely corrected. He stated that in all his cases during the past two years, when possible, he had attached the transplanted muscles to the periosteum.

Dr. Myers said the point mentioned by Dr. Hibbs in attaching the tendon to the periosteum was important; he did not believe in matting tendons together; the connecting bands stretched and the union was ineffective. He had just dissected such a case. If the tendons were divided and the live one united to the tendon of the paralyzed muscle there was also often stretching.

Dr. Whitman said that the operation of periosteal tendon transplantation had been extensively practiced by Lange of Munich, who had reported many cases; his own experience with the operation had been favorable.

Dr. Fiske emphasized the importance of transplanting muscle tendons into the periosteum, especially when the muscle was to work at raising the inner side of the foot or the heel.

CONGENITAL DISLOCATION OF THE HIP  
UNDER TREATMENT.

Dr. Elliott presented a child, aged 2 years, upon whom he had reduced a congenital dislocation of the hip by the Lorenz non-cutting method, showing the bandage in position. He presented the patient to show the position of the leg when the dislocation had been successfully reduced. A slight degree of hyperabduction was necessary, with the knee pressed back slightly posterior to the transverse axis of the pelvis. There was frequently considerable difficulty in getting the head of the femur into the acetabulum and of getting the knee down to the mid transverse pelvic plane, or posterior to it, but unless that could be accomplished the operation should be abandoned as a failure, as relapse was certain.

In the patient presented he felt quite positive of a good result.

## Dermoid Tumor of the Lung.

By H. OTTO SOMMERS, M. D., Washington, D. C., late of House Staff and Assistant Pathologist, Metropolitan Hospital, New York.

At an autopsy held March 1, 1898 (hitherto unpublished), I met with a dermoid tumor of the lung. The patient, a man aged twenty-seven years, died of phthisis pulmonalis chronica. Both lungs were markedly tuberculous and cavernous. At the apex of the right lung was found a cystoid body, containing large masses of hair and some dentoid bodies. Dermoids of the lung are very rare, but those who are inclined to be skeptical as to their existence, I would refer to Ziegler's Pathology, which recognizes the condition, and cites Agle on "Dermoid Growth of Lung," in the Transactions of the Pathological Society of London, XVIII., 1897; and also Jares on "Dermoidcyste mit Cystosarkom der Lunge," in Virchow's Archiv, 138 Bd., 1879.—*The Medical Record*.  
1227 O. Street, N. W.

## Tuberculosis Herniosa.

F. Justain contributes the twenty-ninth case of this rare lesion which has been reported in detail in the literature. The patient was a man of twenty-two who applied for relief from a right inguinal hernia of two weeks' standing. Physical examination revealed that, in addition to his abdominal condition, he was suffering from a pleurisy with exudation on the left side, which was treated by aspiration, but as the temperature still continued high, empyema was suspected, and a thoracotomy performed. No pus was found, but the temperature subsided, and after it had been flat for two months herniotomy was done. The sac was greatly thickened, and contained a considerable quantity of clear fluid, on the removal of which it was seen that the surfaces of the sac and of a coil of intestine were thickly studded with miliary tubercles. The sac was resected as high as possible, and the operation concluded as usual after Bassini's method. The wound closed by first intention, though for a week there was a slight evening rise of temperature; at the time of the report the patient appeared to have wholly recovered. The infection of the hernial sac seems to have been secondary to that of the pleura and a probable latent tuberculous peritonitis, while no signs of trouble could be found in the lungs or other organs. *Deutsche Zeitschrift für Chirurgie*.

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PORTLAND, MAINE, FEBRUARY, 1902.

## Editorial.

### One Thing We Lack.

Though the American page in the history of medicine is luminous, and though the work of American surgeons, specialists, dentists, and physicians has received the praise and commanded the respect of the profession the world around, yet there is one department of science to which the contribution of American physicians have been so few in number and so ordinary in merit—the department of original experimental research—that it may be said that no paper on physiologic chemistry could be written without the original work of American investigators being conspicuous by its absence.

In this statement there is no wish to belittle the good work of certain American bacteriologists, physiologists and chemists, nor to give unusual adulation to the researches of European investigators simply because some wise man once declared that a prophet is not without honor save in his own country, and yet after we give to the labors of Vaughan, Chittenden, Cabot, Hare, Loeb, Stengel, McFarland, Sternberg, Barker, and others, the value which they undoubtedly possess, it may be said that we have no scientific investigator of the status of Schwann, Pasteur, Virchow and Lister or even of the reputation of Kitasato, Koch, Behring, Cohenheim, Adami, Yersin and Bernard.

Though the plodding German mind seems to be especially adapted to this form of scientific investigation yet no one can doubt but that American scientists if placed in the same environment and granted the same opportunities would be able to make up in zeal what they lack in patience and would have been able to make a much larger contribution to the world's scientific knowledge.

After every consideration is given to the enormous contributions which the German, French, English, Belgian, Dutch, Russian and Japanese investigators have made to science, we cannot doubt but that there is a good reason why America lags in this work, and that reason is that our investigators have not equal opportunities.

Such Americans as have made a name in the department of original research have made it in the face of discouragement and hampered by lack of opportunities rather than helped by these important aids. In European countries laboratories are maintained and endowed by the national government and the funds are sufficient so that physicians are paid a salary so liberal that they are induced to devote their whole time and energies to this work.

In America scientific investigation is carried on only as an auxiliary to some other profession upon which the worker depends for his bread. Our scientific investigators are engaged in the work of teaching in colleges and medical schools or are actively



engaged in the practice of medicine in order to gain a livelihood.

America is noted for the number of its rich men and for the size of their fortunes. It is remarkable that in the face of these facts that so little has been done in the way of endowing laboratories for the furthering of scientific research. No need is so great as this and no form of philanthropy would rebound so much to the credit of America and the welfare of its people.

It is very uncertain at present just what the purposes and aims of Mr. Carnegie are in endowing a national college with a fund of ten million dollars, but if the whole sum should be devoted to equipping a laboratory for original research and to paying trained workers in this department an adequate salary so that they could afford to devote all their time and talents to the work, an enterprise would be inaugurated which would reflect great credit on the donor, which would give an impetus to scientific investigation in America, and would confer a lasting benefit on the whole American nation.

#### Adulterations.

##### FIRST—FOOD.

Statistics prove that 15 per cent. of all the food products used by our people are adulterated in some way. By the strenuous efforts of the State Board of Health of Massachusetts it is believed that the ratio of food adulteration has been reduced to about 5 per cent., and yet many of the articles commonly used as foods are still contaminated by injurious substances or the nutritive value reduced by addition of harmless adulterants.

The recent report of Professor Woodman who has been conducting experiments at the School of Housekeeping of the Institute of Technology, shows that food adulterations are of three kinds; 1, Harmless; 2, Directly injurious; 3, Abstraction of a nutritive ingredient.

Among the things of the first class most commonly adulterated are milk, vinegar, chocolate preparations, molasses, honey, maple syrup, spices, coffee, olive oil.

The directly injurious adulterants are mostly restricted to preservatives like formaldehyde, boric and salicylic acids, sodium sulphite, etc., and to chemicals which are added for coloring effects. Coal tar products are used to color cheap jellies, jams, confectionery, and temperance drinks. The green color of vegetables is insured by the use of the salts of copper and zinc.

All this cheapening of food by the use of

adulterations falls hardest upon poor people, for they are obliged to buy and use the cheaper grade of goods.

While many of the adulterants used are in themselves harmless, yet the buyers of adulterated food are hoodwinked and cheated because they use as food something which has a decreased nutritive value.

This subject of preventing food adulteration is of such importance to all the people, and pure foods, well cooked are so intimately interwoven with the health and happiness of the community that those most interested in this subject are urging the necessity of Congress passing a general law which shall control the adulteration of food everywhere, and shall prevent the sending of adulterated foods concocted in one State into other States for sale.

##### SECOND—DRUG ADULTERATION.

Only of less importance than food adulteration is that of the adulteration of drugs. In the use of medicines—agents on which often depends the issue of life or death—it would seem as though common decency would prevent the spirit of commercialism from debasing the business. And yet experts who have investigated this question assure us that there is hardly a drug used in medicine which has not been adulterated, and that even the cheapest drugs are adulterated with starch, ground cocoanut bark and other cheapening ingredients.

The large manufacturing pharmaceutical houses have for years employed trained inspectors and chemists to insure the purity of the drugs used in their business, but of late even adulterated alkaloids and counterfeit phenacetin, trional, sulfonal, aristol, etc., have been placed upon the market.

In a recent editorial the editor of the *New York Medical Journal* says:

"A case was recently tried in a Detroit court, the testimony in which is convincing proof of the fact that substitution of a dangerous kind is only too prevalent, and that, moreover, those engaged in the practice on a large scale are reckless and careless to a degree difficult to conceive of. One employee of the person on trial testified that he did not know what the substance was which he was putting up in bottles, did not know which labels he should put on—all were powders—and that no one told him! The books of this gang of counterfeiters are said to show that their counterfeit goods have been sold to thousands of druggists all over the country. It therefore behooves the prescriber to make sure that his prescriptions are filled as written. When

any doubt of this is felt, a sample of the medicine dispensed should be sent either to some analytical chemist or to some manufacturer, for examination as to its purity and strength."

A recent number of *American Medicine* contains the following words of caution:

"Substitution extraordinary is illustrated in a history supplied by the *Farbenfabriken of Elberfeld Company*, who have been able to ferret out a most despicable adulteration of chemicals practiced by a band of drug counterfeiters. Not only were the products themselves imitated, but the boxes, labels, etc. Druggists buying aristol, phenacetin, sulfonal, trional, etc., should be on their guard against sophisticated articles. The protest of the manufacturers rightly contends that 'both the physician's reputation and the welfare of his patient are at stake in this matter. When, therefore, we protect ourselves against these criminal practices we believe that we are equally protecting the medical profession.'"

#### A Prize Contest.

We take pleasure in calling the attention of our readers and the profession of the State to the liberal offer of the Maltine Company in their Prize Essay Contest.

The prizes offered are so large as to be worthy the best efforts of any physician and the subject chosen is of such importance and range that every physician, each in his own way, can find something interesting and instructive to say about it.

The judges are physicians of such well known reputation and scholarly attainments that confidence will be felt in their decisions and every contestant can feel assured that the principles inaugurated by the donors are carried out with justice and fairness.

#### The Maine State Sanatorium.

At the present time a united effort of laymen and physicians of the State has been inaugurated, animated by the purpose of establishing a State Sanatorium for the cure and decrease of consumption.

No public charity can be more worthy of the aid of the well-to-do or more entitled to the individual contributions of every man, woman and child of our commonwealth.

Every plan, like every tree, is known by its fruits, and the open air treatment has now been so long on trial as to have stood the test of time, and the results have been so encouraging as to warrant the hope that through this means the ravages of this dire disease will be much lessened, and the people

so educated as to be prepared to prevent its spread.

When the elements rise in their might and thousands of lives are lost from the ravages of fire or water, the sympathies of our whole people are aroused and contributions pour in to lessen the suffering and distress. This is as it should be, and the American people have never been found unmoved by such appeals.

The annual ravages of consumption, while not attended by the dramatic effects of sudden disasters, are yet in their sum total more disastrous to human life and health than all the disasters of flood and field, and all the destitution of war and famine.

This disease is ever present in our midst, and so universal is its spread that there is hardly a family in any community in which some loved one has not fallen a victim to its ravages. Though attended by a most alarming deathrate the principles underlying its cause and its propagation are now well known.

To a considerable extent preventative medicine has proved the truth of its dictum, that every infectious disease is a *preventable* disease. Consumption is mildly infectious, and therefore to a considerable degree its ravages can be prevented. To reduce the number of deaths caused by this disease is something in which all are interested and to which all can contribute. A State Sanatorium is an important means to this end.

Such an institution will cure many cases of consumption, and more than this it will be a means of education as to the measures to be employed to lessen its spread. Patients going out from such a hospital will be fortified by that knowledge and trained in those measures needed to erect safeguards in every community to prevent its ravages.

In this great work for the public good all may have a part. Contributions, large and small, will be thankfully received and will aid materially in helping along a good cause.

"The immense improvement of the health of the Cuban community since it has been under American control is a testimony to the advantage accruing from modern sanitary knowledge and methods," says *The British Medical Journal*. "The island has been one of hygienic ill-fame for centuries, but vigorous methods have not only minimized the effects of yellow fever, but have greatly reduced the prevalence of malaria and the mortality generally. Such striking results will encourage those who have commenced a crusade against disease in the tropics."

## Reviews.

DA COSTA. CLINICAL HEMATOLOGY. A Practical Guide to the Examination of the Blood with reference to Diagnosis. By John C. DaCosta, Jr., M. D., Assistant Demonstrator of Clinical Medicine, Jefferson Medical College; Hematologist to the German Hospital, etc. Containing 9 full-page colored plates, 3 charts, and 48 other illustrations. Octavo, 450 pages. Published by P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia, 1901. Price, \$5.00, net.

This book, designed as a practical guide to the examination of the blood by methods adapted to routine clinical work, represents an endeavor to recount the salient facts of hematology as they are understood at the present time, to correlate certain of these facts with familiar pictures of disease, and to apply them to medical and surgical diagnosis. The purpose has been to interpret the blood report according to its true value as a clinical sign, neither exploiting it as a panacea for every diagnostic ill, nor belittling it because of its failure consistently to give the sought for clue in every instance.

The methods of examination likely to prove useful in everyday practice have been described in detail, in the hope of thus simplifying the minutiae of blood-counting, staining and other means of investigation. In the discussion of the primary anæmias and of the anæmias peculiar to infancy, prominent clinical features other than those referable to the blood, have been briefly mentioned, in order to add clearness to the differential diagnosis. For convenience in reference, the various diseases included in the section on general hematology are arranged alphabetically, rather than grouped according to a traditional classification.

The greater part of the original data referred to in the text is taken from the records of the Pathological Institute of the German Hospital, Philadelphia, where a systematic account of all blood examinations has been kept for the past six years. The remaining data represent the writer's personal examination in hospital and private practice and in the army medical service, these sources of statistics together including about four thousand blood reports in various pathological conditions. Hematological literature has been freely consulted in the preparation of this volume, and due credit in the text has been given to the authors of whose labors use has been made.

An additional noteworthy feature of Dr. DaCosta's book is its illustrations. Recognizing the importance of correct illustrative

work in a book on Hematology, an effort has been made to make the colored plates represent as exactly as possible the subjects as they appear to the eye, and have in this attained more than the usual amount of success. With the charts and numerous black and white reproductions the same care in preparation has been exercised.

The author's aim has evidently been to write a book which will be of practical use to students and the general practitioner, and in this effort he has been largely successful.

AMERICAN EDITION OF NOTHNAGEL'S ENCYCLOPEDIA. Variola, Vaccination, Varicella, Cholera, Erysipelas, Whooping Cough, Hay Fever. Variola (including Vaccination), by Dr. H. Immermann, of Basle. Varicella, by Dr. Th. Von Jürgensen, of Tübingen. Cholera Asiatica and Cholera Nostrae, by Dr. C. Liebermeister, of Tübingen. Erysipelas and Erysipeloid, by Dr. H. Lenhartz, of Hamburg. Whooping Cough and Hay Fever, by Dr. G. Sticker, of Giessen. Edited, with additions, by Sir J. W. Moore, B. A., M. D., F. R. C. P. I., Professor of the Practice of Medicine, Royal College of Surgeons, Ireland. Handsome octavo volume of 682 pages, illustrated. Philadelphia and London, W. B. Saunders & Co., 1902. Cloth, \$5.00 net; Half Morocco, \$6.00 net.

The articles included in this volume treat of a number of diseases second to none in importance, whether regarded from the standpoint of Preventive Medicine or as the cause of widespread sickness and death. Although the excellence of the German work and the detailed and comprehensive manner in which the respective authors had dealt with their several subjects left comparatively little to be added, the editor has not hesitated to amend the text whenever necessary, and has also embodied the results of his personal experience, gained during a varied practice extending over thirty-three years.

One of the most timely articles included in the work is that on Variola, including Vaccination and Variolation. Dr. Immermann's monographs on these subjects, now of vital interest, especially in the United States and Great Britain, have probably never been equaled for circumstance of detail and masterly argument.

The other articles, each by a German specialist of recognized authority, are also skillful expositions of the particular disease under discussion. The entire volume being edited by a specialist of acknowledged ability, the work, it will be seen, has been brought precisely down to date. It is, indeed, a magnificent contribution to the literature of medicine, and is one which will be especially welcome at the present time. Those who

have not been able to read Nothnagel's work in the original, will extend hearty thanks to editors and publishers for putting in the hands of American physicians this excellent work.

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STUDIES IN THE PSYCHOLOGY OF SEX. SEXUAL INVERSION, by Havelock Ellis, L. S. A., (England): Fellow of the Medico-legal Society of New York, and the Anthropological Society of Berlin. Honorary Fellow of the Chicago Academy of Medicine, etc., general editor of the Contemporary Science Series since 1899. The "Studies in the Psychology of Sex" will probably be completed in five volumes. "Sexual Inversion" is the second volume in the series. Pages xi-272. Size, 8 $\frac{1}{4}$ x5 $\frac{1}{4}$  inches. Extra Cloth, \$2.00 net, delivered. Sold only to physicians, lawyers, advanced teachers and scientists. Philadelphia, Pa., F. A. Davis Co., Publishers, 1914-16 Cherry street.

This is an important book, treating in a judicious manner a most important subject. It is a work addressed to mature minds and should be read in the spirit in which it is written.

The book represents a large amount of labor, much gleaned and deep research, and is a clear and comprehensive presentation of a subject about which little is known even by medical men.

That the book has a "mission" is proved by the early call for a second edition. In this edition the subject matter has been thoroughly revised, many additions have been made and a few things eliminated.

Sexual Inversion is the second volume in the series of studies of Psychology of Sex, and is a book which we recommend to physicians.

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A BRIEF MANUAL OF PRESCRIPTION-WRITING in Latin or English for the use of Physicians, Pharmacists and Medical and Pharmaceutical Students. By M. L. Neff, A. M., M. D., Cedar Rapids, Ia. Pages v-152. Size, 8x5 $\frac{1}{4}$  inches. Extra Cloth, 75 cents net, delivered. Philadelphia, Pa., F. A. Davis Co., Publishers, 1914-16 Cherry street.

In these times of slovenly prescription writing this book is of importance. The instructions therein contained are simplified and yet ample to meet the end sought.

While we do not think it desirable that a book should be devoted to enabling students who know nothing of Latin in a literary sense to write prescriptions correctly (simply because a higher standard than this has already been adopted by medical schools worthy of the name) yet because a majority of physicians are unable to write anything above the standard of abbreviated Latin, and because most authors of textbooks are too ignorant or too shiftless to make any attempt to raise the standard of prescription writing above that of the clipped

and hodge-podge variety,—for these and other reasons—this book is welcome because it meets a real need.

Short chapters on incompatibility, the metric system and dosage add to the convenience and value of the book. The volume is well printed and tastefully bound.

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TRANSACTIONS OF THE NEW HAMPSHIRE MEDICAL SOCIETY, at the 110th Anniversary held at Concord, May 16-17, 1901.

Judging from the papers published, the New Hampshire Medical Society must have had very interesting and instructive meetings at its last session.

The essays presented covered a wide range, both surgical and medical, and were well written and intelligently discussed.

We note with satisfaction that Dr. Watson of the State Board of Health was able to announce that the legislature of his State had granted an appropriation sufficient to equip and run a State Bacteriologic Laboratory for two years. This brings to mind the ineffectual efforts of our own physicians to induce our legislature to grant an appropriation for a similar purpose, and also moves us to remark that in matters relating to public health it would be altogether more appropriate if our State motto were changed from *Dirigo* to *Cunctor*.

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## Correspondence.

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### Something on Small-pox.

*To the Editor of the Journal of Medicine and Science:*

As, for a year past, I have culled fresh experiences from pastures new, it might be that a few words on the subject of small-pox would be of interest.

When, last summer, from my old "dispensary" neighborhood—where men, women and children swarm, there being 1,500 people on the property in tenements, of one owner—a child was wheeled in an open "perambulator," which is Bostonese for baby carriage, to the city hospital, we all knew—as the said vehicle rested in front of the visitor's entrance, opposite my present "infirmary" door—that, the baby having been found to suffer from small-pox, an epidemic might be expected, in short order.

Dr. Durgin, of the Boston Health Board, tells us that the first case—outside of this origin—was in a factory here, where 2,300 persons were employed. Within 48 hours of the discovery of the first case 12 of these operatives were found to have the disease,

without their knowing it. Since then there have been 500 cases of small-pox in Boston, but only 75 deaths from the disease.

As the cases have been increasingly more scattered, and contagion from various sources spreads the infection in other States, let us try to study a few facts in methods of cure and their modern application. I do not now refer so much to the regulation treatment as to several means of relief not laid down in the routine practice. All physicians have their standard "Practice of Medicine" and their own experience, observation and judgment to draw from, but I have found "something new" perhaps and maybe not.

Common "cream o' tartar"—or, as I use it, the crude product, prepared by "a process of my own"—too long to give here now—when combined with certain antiseptics (sometimes even alone) will not only tend to prevent, but often positively cure the disease.

Now, don't you smile, in the sweet, but more often sarcastic way of some doctors; for a doubter may be dishonest, unless he at least tries to disprove what has been done—a hard thing to do! Whatever the *modus operandi*, there is little room to doubt the tartar's efficacy in several really, severe cases I have been "caged" with. How it prevents, or why another "remedy," like a large tablespoonful of pure cider vinegar in half a cup of water four times daily, may also prevent the disease, I do not stop to attempt to explain (It may be said, also, that the same sort of vinegar, applied externally, will allay the itching and largely prevent the pitting in small-pox, although it may not be so effective, or scientific as "carbolic acid" ointment—one part of crystalized carbolic acid, three of camphor and three to five parts vaseline—which will soon quiet the most intense itching. See Foster's Therapeutic for this.) Either application may be used at same time with Salol (a dram a day, as given by Begg: *Brit. Med. Journal*, June 2, 1900—or say 15 grains every four hours) which alone has prevented pustulation.

If any doctor, of to-day, is too "scientific" to now use pure cider vinegar, he knows, no doubt that Ingalls and Yeager treated 36 cases of small-pox with baths of bichlorid without a death. (A six foot tub beside the bed, with a warm solution, 1:10,000, immersing patient 10 to 12 minutes, twice daily, has reduced the mortality to a minimum of nothing. *Jour. Am. Med. Asso.*, April 28, 1900.)

As to the drug treatment that I have found to prevent disease to a large extent,

apparently it has certainly effected the purpose equally in several cases of severe vaccinia and "stopped the action" of the vaccine virus; so that, in at least one instance the doctor said it was not "taking" and threatened to "do it over," but desisted when "the medicine was omitted" and "the action began again." I now use the acid salt (*potassii tartras acida*) "obtained from crude tartar deposits during fermentation of grape juice. This I sometimes combine with sulphur and some "antiseptic," of course; and as I employ eucalyptus, and wish to be "scientific"—as well as add to the limited technical, not to mention pharmaceutical terms of the present day—I name the preparation, "Argolyptol." This, used every morning, has, it seems, prevented small-pox; and, surely, has caused vaccine virus to cease its action—by some change in the system, I suppose! But, when there is a confluent case, or a handsome hemorrhagic one of small-pox, I would add Salol and some other "rubbish"—in shape of "antiseptics"—depending certainly somewhat on the condition—and this, as usually prepared, I have called "Salolyptol."

There, you have it—expressed about like the New Jersey "old woman" doctor's idea—who "cuts the bark up the tree and calls it hypopelorum and cuts it down the tree and calls it lowpopelirum," the one to prevent and the other to cure the severe wounds of "that Jersey animile, the skeeter." Still, the newly named and manufactured "medicine" I have mentioned, cut from the same vine, but varied by a figtree product, or a little apple juice, is a remedy that can be made to produce results in a dread disease."

I will soon report some of them, although I do not intend to insist that this shall be put on a par with the serum treatment, but I do think it can be shown to be equally "rational and efficient" in small-pox. (See *N. Y. Med. Jour.* Sept. 5, 1896).

E. H. JUDKINS, M. D.

Boston Mass., Feb. 5, 1902.

In San Francisco a graduate of West Point sank into helpless poverty and died of starvation because he was too proud to earn a living by following any occupation which he considered beneath his dignity. There are hundreds and thousands who prefer to live in dependence and be pinched with want, rather than to seek or accept any work that is not considered genteel. It is time to give a black eye and a bad name to swell-headed nonsense and educated good-for-nothingness.—*Rev. C. G. Ames.*

## Selections.

### Some Points on Intracranial Neoplasms Considered from the Neuronic Standpoint.\*

By F. SAVARY PEARCE, M. D., of Philadelphia, Professor of Nervous and Mental Diseases in the Medico-Chirurgical College of Philadelphia, and Neurologist to the Philadelphia Hospital.

**History of Brain Tumor.**—This subject is an important one to the general practitioner as well as to the neurologist, on account of the relative frequency of this disease as compared with other organic diseases not only in adults but also in children. Cerebral neoplasm is also of vital import in medicine, because of the possibility of its treatment by surgical procedures, if a diagnosis can be made early. It is the purpose of the present contribution, based on careful observation of this disease, to point out the possible reason in the neuronic theory so-called, for the great difficulty of determining the site and extent of lesion. Considering that the history of brain tumor dates back but a score of years, when Bernhardt first wrote upon the subject, the wonderfully rapid scientific development of this branch of medicine, through the study of anatomy and physiology of the central nervous system, is forcibly brought to our attention and we are indebted for this advance of knowledge to the line of workers represented by such authors as Steffan, Bramwell, Jacoby, Mills and Lloyd, Starr, Knapp and others. From the knowledge thus gained as shown in the final summary of 600 cases reported by Starr, at least 7% of tumors can be removed. This is encouraging as regards surgical technique, but shows a lack, withal, of ability to cope with this one of the most serious diseases; existing as it does, in the highest structure of the body.

As early diagnosis and location is the essential point for successful treatment, therefore it is with the hope of advancing some reasons for inability to determine by the ordinary methods of cerebral localization, some cause for disturbances manifesting themselves in aberrations of functions which are at variance with all anatomical and physiological knowledge. The history of the development of the neuronic theory is naturally followed by the hope of explaining some diseases by this fascinating speculation. The writer has attempted explanations of epileptic seizures with this hypothesis in a paper on "Epilepsy," read before the Philadelphia County Medical Society in 1896.

\* Read by invitation before the Section of Medicine, New York Academy of Medicine, May 21, 1901.

Bechterew, Forel, His and Cajal abroad, and Dercum, in this country, should receive the grateful thanks of the scientific mind for presenting this acumen of thought, although the materialistic, and therefore grosser, bases for nerve cell action and life may never be brought in accord by any determination of even anatomical changes as seen by the microscope. I say this discharge theory is most fascinating, if difficult to apply in all cases.

Physiological chemistry no doubt plays an important rôle in the determination of the toxic causes of brain symptomatology, much as in hemi-anesthesias of Bright's disease; still a certain number of phenomena remain as yet unexplained, but by the theory of neuronic separation and sequent perversion of neural energy.

The phenomenon of hypnotism also comes forward in proof of the realism of the neuronic theory.

**Etiology of Brain Tumor.**—The heredity of a tendency to cell degeneration and overgrowth in the form of neoplasms is a most intricate study; but we feel sure, with extending experience, that the cellular theory of Virchow must be considered tenable in the light of developing scientific truths in neurology as shown in the recent scientific researches. For example, as to intracranial neoplasm, a case seen in consultation with Dr. Dubbs, diagnosis of cerebellar tumor in a young lad, was fortified by the fact that the mother had died from the same condition. Traumatism also is a predisposing cause to tumor of the brain; though we are here again in want of actual proof of this, yet not of the fact that a cerebral neoplasm is frequently increased in growth by an injury to the head, as in one case seen in the Philadelphia Hospital this winter, in a man, 45, who had been in a *mêlée* showing bruises about the head and chest, and suffering with aberrant symptoms of concussion of the brain with left hemiparesis. The case finally came to autopsy, when a tumor of the right parietal lobe was discovered. It had evidently been latent up to this time.

Or, again, the intoxication as of alcohol, lead or of specific disease, as syphilis or influenza, may be the precipitating cause of symptoms; much masked first by the said intoxications, to which is frequently added an hysterical element. Finally, the resultant symptom of brain tumor alone will explain the fundamental cause of the disease. I take it here, that we have a most difficult problem to solve; but it is likely in some cases, aside from mere disturbance of circu-



lation cutting off proper neuronie inhibition of nervous impulses, we have resident in the aforesaid exciting causes, the insult to the disturbed nerve function in the neurons alone, or which are working at a point near the "breaking strain." Then it is the association of impulses, at least, is ruptured and symptoms of brain tumor will present. The nature of the pathological growth in these obscurely developing cases, irritating cell contraction will much modify the method of onset of symptomatology; since the integrity of the association fibers will be more or less jeopardized by the essentially destructive nature of the disease, *per se*. Thus a soft simple-round-cell-sarcoma, a psammoma, or an extravasation cyst of slow development may exist without producing localized or general symptoms in proportion to the apparent injury to the cerebral neurons; whereas, a minute dense tumor, as a fibroma or endothelioma, when developing from within the encephalon, would, by destruction, produce more widespread symptomatology and more localizing special symptoms of the neoplasm. Pressure growths are also less symptomatic therefore.

With an increasing experience in observing my own failures, as well as those of others to diagnose some of these cases, I am convinced more and more that underlying the anatomical basis of symptomatology, as it were, there is an individual element of resistance to nerve impulses in different sorts of protoplasm in this highest type of tissue—the neuron. So that scientific as we may be and great as its importance, there must be the general *ensemble* of abnormal physiology to reckon with, which still leaves this most difficult branch of medicine, in major part, within the realm of high art.

**Special Symptomatology.**—As we know today, the symptoms of cerebral neoplasm which change or modify the efferent impulses from disease within the brain mass, are the principle ones we most rely upon to diagnose brain tumor and allied conditions. Thus the hyperesthesia, paresthesias or anesthetics, depending upon irritation or destruction respectively in some part of the sensory tract, and depending also upon its localization, will be valuable signs in determining the situation of the tumor, in the typical case. On the other hand, the muscle rigidity, increase of reflexes, superficial and deep, convulsions sequent to such condition more or less transient, finally permanent paralysis of the part involved, will be important diagnostic signs of a neoplasm in the motor tract. Still it must be remembered that

we have microscopic changes where the remaining neurons in immediate contact will carry on vicarious function for some time; and this is as yet undetermined by our want of knowledge of the physiological point of extreme tension; and where the symptoms of neurasthenia or hysteria may gradually grow to paramount place; finally, degeneration progressing, and symptoms of organic disease present when "too late to mend." This is a point in proof, it seems to me, of the neuronie theory still tenaciously maintained in America by my colleague, Dr. Dercum. Per contra, as showing that anesthesia can also exist without organic lesion; and therefore in support of the neuronie theory, in separation of contact of one neuron with another, it would seem a recent case coming to a careful necropsy in my own wards in the Philadelphia Hospital, demonstrates pretty clearly. The case had been diagnosed one of hysterical anesthesia by Dr. C. K. Mills, involving the left face and arm down to the wrist and upon the left trunk as far down as the eleventh rib in the axillary line, below this point there being a hemi-hyperesthesia of the remaining left trunk, extending to the lower extremity. The anesthesia in the face came to the midline pretty accurately and obtunded sensation but little in the left cornea. The man died of lobar pneumonia involving the right lung. On careful examination of the brain by the pathologist, Dr. Joseph McFarland, and myself, there was found absolutely no change in the brain structure, every part of which was minutely investigated. Here, then we have a proof of hysterical, if you please, lessening and absence of sensation on one side of the body accurately defined, and yet no lesion determined. It seems here a missing link is certainly found, albeit in a negative way, in support of the neuronie theory of accounting for modification of nerve impulses in functional disease.

**General Symptoms of Brain Tumor and the Neuronie Theory.**—Among general symptoms of brain tumor, headache is a most characteristic one. Since the ramifications of the fifth nerve are confined particularly to the dura within the cerebral cavity, the pain of brain tumor is necessarily the result of irritation of these fibers. This symptom may be extreme, however, even in cases where the growth is deep within the encephalon. I am not willing to believe that in every case it is excess of intracranial pressure from the neoplasm that causes head pain in these deep-lying tumors, and I am therefore more free to feel that possibly

irritation of the neuron produces an irregular flow of nerve impulse, which gives evidence as *head distress*, by the mere fact of such a perversion of function of nerve force, whatever that may be (*perhaps electricity*). Assuming this origin for pain in cerebral tumor, it would be somewhat likened to the less intense and more vacillating "helmet-like" distress of neurasthenia, in cases of which disease I have observed head pain not to be distinguished from that positively known to be of cerebral tumor origin. So that aside from evident cortical growth irritation and pressure symptoms as a cause of pain in cerebral tumor, it would seem plausible to add that head distress is due in part to irregular neurononic activity and sequent disturbance of the proper distribution of nerve impulse, which can in some measure be accounted for by neurononic separation within the brain mass. Headache due to galvanism of scalp is a point in favor of the theory of neurononic activity, the energy of which may here indeed be well assumed to be electric force.

*Cerebral or Reflex Vomiting.*—The usually accepted view of cerebral vomiting being due to pressure of the growth, therefore causing irritation of the vagi and the resultant emesis, can also be explained to my mind (in the cases where there is no excess of intercranial pressure), by assuming an irregular discharge of nerve force through these particular nerves as the result of neurononic irregularity of function; the discharge being but an exit to a stored up excess. That in some cases on taking food into the stomach, vomiting does occur at times in brain tumor, is another point in favor of the fact that the afferent impulse is carried to the brain, there to be reinforced by the irritability of the brain mass; then, being reinforced, is transmitted to the gastric walls through the vagi. This certainly could not be explained by a pressure, *per se*, even though we admit the pressure is the cause of irritability.

*Stupor.*—Mental obtundity in brain tumor cannot be entirely explained away, it seems to us, by assuming destructive lesion only; since in many of the cases with greatest amount of stupor (and not necessarily in the frontal lobes lesion), we have no other marked somatic evidence of irritability or palsy. So that slight irritation of a growth may be sufficient to produce retraction of the dendrites (or by excess of the intercellular serum pressure may thus separate one neuron from another), and preventing by this breach of contact, the abeyance of

thought which is the most delicate action in the brain that would present, as is so in brain tumor, long before physical disabilities are "en evidence." The neurononic theory is apparently tenable here. In judging of this theory, I reiterate, we recognize the impossibility of proof; but reasoning from analogy with other physical mechanisms, the evidence of such activity seems fairly conclusive.

*Special Symptoms.*—Subjective sensations as of tinnitus aurium may be due to irritation of the cells of the nuclei of the acoustic nerves, just as the pain of locomotor ataxia must be due to irritation of the posterior roots of the spinal cord; and how better can you explain this latter than by the assumption of an overflow of nerve impulse caused by irritation of the neurons, and perhaps through movements produced by irregular throwing off of energy from an overcharged system? So it would be with cerebral neoplasm concerning the other special senses from this neurononic standpoint; which need not be detailed here.

*Motor Phenomena.*—Convulsions of the precedent tumor, and choreiform movements may be entirely due to excitation of the neurons through over-activity of the movement of them. This seems convincing to me, since specimens I have seen of tumor of the brain of large size which did not produce any convulsions whatever until very late in the disease, could in this way be accounted for, viz.: That immunity to excitation occurred in such gradually growing growths; and that finally, vicarious function being carried on *well* up to a certain period, a breach of functionation suddenly occurred, explosive impulses followed, and the patient is suddenly carried off. This happened in a case of my own recently, where there was no evidence of intercranial pressure, the patient finally going into convulsion and dying in this status from exhaustion. There was no toxic causal factor made out in this case.

Recent experiments by Charpentier, published in the *Review Scientifique*, tend to prove an electric theory of nerve force. This electric theory was also upheld in a paper read by Dr. O'Brien before the Medical Society of the State of Pennsylvania in 1900, in which he ingeniously compares the finer electrical apparatuses with the mechanism of the nervous system. And to my mind, it would seem that the neurononic theory also explains away the mechanism of the nerve force action in the human body. But I do not wish to weary you!

**Conclusions.**—From the evidence gotten in the symptomatology and pathological findings in cases of cerebral neoplasm, as well as in functional disease of the nervous system in particular, it would seem that there is ground for believing in the domination of electric energy as a cause of a continuance of life processes after birth, which from a theoretical point of view, as stated, would seem likely to be a form of electricity.

While appreciating the value of anatomical and, therefore, regular physiological perversions as most exact causes for determining the general and special symptoms of tumor within the brain, still the limitations of knowledge even of the said anatomico-physiological abnormalities produced by growths will not entirely explain our inability to diagnose tumors in a large minority of instances of this disease. Some evidence is here proposed to account for this inability to determine a cerebral neoplasm, through assuming perversion of functionation by disturbed neuron physiology; and with this neuron theory of separation of dendrites, we may account for otherwise unexplained symptoms.

The more we study life processes, the more it seems to me that protoplasmic life being established, electricity is the governing motor force. And following this line of thought, it must be that the mechanism of the central nervous system which contains the nerve force or electricity, if you please, should have some mode of action in the control of this vital energy—and that the neuron theory best subserves explanation of the phenomenon.

A case coming to my attention at the last moment in the preparation of this paper, is "en evidence." A physically healthy woman in the insane department of the Philadelphia Hospital, subject to petit mal, died suddenly without any known cause. At the autopsy on May 9th, 1901, there was found absolutely no pathological condition to explain the cause of her death. In this case, an over discharge of nerve force to the inhibition of the heart through the vagi will alone explain the death; the normal heart being found in firm systole at the necropsy. The neuron theory will partially explain this case.

My position certainly seems tenable as a cause of expression for nerve impulses that are *not normal*. This seems to me the more probable, as we seek more and more the intricacies of life processes which are styled normal and abnormal.

A quotation from Prof. Ranney's writings can be well given here to elucidate the normal action of the nervous system. "All day long, and every day, multitudinous apparent impulses from eye, and ear, and skin, and muscle, and other tissues and organs, are streaming into our nervous system, and did each afferent impulse issue as its correlative motor impulse, our life would be a prolonged convulsion.

"As it is by checks and counterchecks of cerebral and spinal activities, all these impulses are drilled and marshalled and kept on hand in orderly array till a movement is called for; and thus we are able to execute at will the most complex bodily maneuvers, knowing only *why*, and unconscious or but dimly conscious how we carry them out."—*The Philadelphia Medical Journal*.

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**\*Observations of Seven Years' use of Creosote in Pneumonia.**

By J. L. VAN ZANDT, M. D., Ft. Worth, Texas.

When I left college in 1866, I had been taught that the proper treatment of pneumonia was by means of blood letting and tartar emetic in the first stage, and, later, calomel and blistering. Nothing or but little was said of the "*vis medicatrix naturæ*," and when Jim Miller, about four miles north of Dallas, got well, I congratulated myself that I had *cured* one case of pneumonia.

Within a year or two I read a work on practice, by J. Hughes Bennett, of Edinburgh, in which he laid great stress on feeding and gave but little medicine, but yet his mortality was much less than I had seen elsewhere reported. Later I read a little work, "*Nature and Art in Disease*," by Sir James Forbes. Then it dawned on me that a large per cent. of cases would get well with or without medicine if we could only keep them alive long enough. In other words, pneumonia was a self-limited disease and would run its course if not interrupted by death.

It is true I gave medicine from the beginning of the attack, hoping to modify the disease, though I had no hopes of aborting it or materially shortening its course. For a long time I gave carbonate of ammonia to all cases, and, later, except in asthenic cases, I gave salicylate of ammonia. I believe the disease was distinctly modified by these remedies. Not until long after I began the

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\* Read before the Southwestern Tri-State Medical Association at Dallas, Texas.

use of salicylate of ammonia did I know that the salicylates had been vaunted as a specific in the disease. I did not give in sufficient doses for this and so got only a modifying effect. I believe that measles was about as amenable to an abortive treatment as was pneumonia.

So you will see I was not looking for a cure for pneumonia when I gave creosote to my first case, one with an enteric complication, and was as much surprised as anyone at the result.

A shrewd aunt of mine said, when I was a small boy, that I would learn better from observation than from books. From books I learn that pneumonia is a self-limited disease and must run its course. From observation I learn what is "better," that in a large per cent. of cases creosote has a decidedly curative, I might say, an abortive effect.

In a former paper (*N. Y. Med. Record*, March 30, 1901), I gave extracts from a number of writers who enthusiastically claimed the curative effects of creosote in pneumonia, also reported sixteen consecutive cases of my own, treated during the winter of 1899 and 1900, of which four were dismissed on the second day, five on the third, and one on the fourth, (10 or 62½ per cent. by the end of three days), one each on the fifth, sixth, seventh and eighth, and two on the tenth days. Since that time I have lost only one case. That I shall mention later.

As further evidence on the curative effect of creosote, I will give some extracts from personal letters received since my last paper was written. Prof. Andrew H. Smith, of New York, says: "I have long felt that in all probability, the pneumonia of crisis belonged to the infection with pneumococci, while lysis indicated a mixed infection. This applies, however, only to cases not treated with creosotal or other germicide. I believe such treatment is capable of causing an early lysis, before the time for crisis arrives, say by the second or third day the fall would begin. I have seen many such cases, and have rarely seen a crisis when the remedy was begun early."

Dr. A. H. Davidson, of Boerne, Texas, says: "I saw your first report on creosote in pneumonia (1898) and since then have used it in all cases with good results."

Dr. Emma H. Yates, of Ander, Texas, says: "You taught us that creosote gave startling results in pneumonia, and I have certainly found it so. I have been agreeably surprised that my patients did so well. I seldom needed to make a second visit. At first I doubted my diagnosis when they re-

covered so speedily, but I could not confirm my doubts. I was positive the diagnosis was correct." Having to make long trips to the country, she says she left medicine with instructions to send report the next day, and reiterates that she seldom had to make a second visit. She had been practicing only two years and had only ten or a dozen cases, but had been well pleased with results in all.

May 11th, about six weeks after the publication of my last paper, Dr. Geo. H. Sanborn, of Henniker, N. H., wrote to "personally thank" me for it. The day after reading the paper he sent to Boston for the carbonate of creosote, and in a few days was called to see a lady æt. 45, sick two days, pulse 120, respiration, 40, and temperature 105, with rusty sputum. He gave creosote carbonate and went back next day and dismissed his patient, thinking he had made a mistake in diagnosis. He was called back the same evening to find the symptoms as bad or worse. He resumed giving the creosote and had a speedy recovery. Further, he says he had treated three other cases, all getting well, in a very short time. The last case was a man 50 years old, temperature 105, respiration 50, and pulse 140, "raising large quantity of rusty sputum." This was the evening of the first day's illness. He gave creosote, and at his visit the next morning the wife met him at the door and said, "Well, Doctor, I guess you made a mistake about that being pneumonia. My husband is all right this morning and is hungry." The Doctor, to use his own words, "did not propose to run any chances and did not omit the medicine," but continued it for three days at longer intervals, and the patient was at work in a week. He then goes on to contrast this with his former experience and with the teaching of the books.

It will be noted that my report of cases shows an unevenness of results, 25 per cent. of cases being dismissed on the second day, 21 per cent. on the third day, and yet 12½ per cent. went on to the tenth, though in all the protracted cases the disease was distinctly modified.

One writer says: "When given early in the attack the results are almost specific." While admitting the beneficial effects of early giving, I have seen as decided effects when given later, on all symptoms save the color of expectoration, as when given early. It has occurred to me, from my own and the observation of others, that the difference of results was due not so much to the time of giving as to the difference in the infecting micro-organism. I have been impressed with the

idea that the pneumococci infected were the most amenable to treatment, but a lack of microscopical equipment has prevented me from putting this impression to the test.

Since I began using the *carbonate of creosote*, October 29, 1899, I have had but one fatal case of pneumonia. That was April 7th, last, and to that patient the carbonate of creosote was given early and freely and seemingly with no effect whatever. This case, while in a measure having the appearance of an ordinary attack of lobar or croupous pneumonia, had some very peculiar features. He was taken with a chill about 3 A. M. I saw him six hours later. He had pain in the side and cough and was expectorating a rust-colored sputum. I diagnosed a pneumonia but did not at the time locate the pulmonary lesion. Later, however, I found the posterior part of the left lung involved from top to bottom, while the anterior part and the whole of the right one seemed to be entirely free from disease. These conditions continued throughout the attack, which lasted almost twenty-one days. All of this time could be heard posteriorly, tubular breathing, associated with fine and coarse crepitation. The expectoration varied very little.

In May last, while on a visit to Marshall, Texas, at my suggestion Dr. J. F. Roseborough gave carbonate of creosote to a very irregular case of pneumonia, and though the patient recovered, I am very sure the creosote did not help him. About the time this patient was convalescing, a brother was taken sick, and after five days of high fever developed pneumonia symptoms. This patient, though given carbonate of creosote freely, died.

The conclusions I have reached are these: A large per cent. of pneumonic cases are cut short or aborted, almost all the rest are mitigated, and the remainder, a very small per cent., are not at all affected by the remedy.

I have been thus particular to dwell on these unfavorable cases for two reasons. Honesty requires it, and should one of you who has not already done so, be disposed to try the creosote and find first one of the non-yielding cases, he might be disposed to discredit the whole thing.

As illustrated in Dr. Sanborn's first case, it has been found that the medicine must not be omitted so soon as active symptoms have subsided, because there will almost surely be a recurrence, as I have known quite a number of times. The medicine should be continued in less quantity or greater intervals for at least three days. In broncho-pneumonia a longer time is generally better.

A few words with regard to the particular preparation and dose and I am done. My original formula was made by adding one drop of creosote to my then common dose of seven and a half grains of salicylate of ammonia. This combination I continued to use in most cases till 1899. In some, creosote was given without the salicylate, because of great prostration or gastric irritability. I lost as I now remember, two cases of my own, and two turned over to me "in extremis." Some of these I think might have been saved by my present medication.

In 1899, I read an abstract of a report of a case treated with carbonate of creosote, by Cassoute, of Marseilles, France, and as it furnished an easy and pleasant way to increase my dose of creosote, I at once adopted its use and have found no difficulty in giving it in any desirable dose to any patient. It is almost devoid of taste and odor and may be given in emulsion or stirred in hot sweetened water to be taken during agitation as it does not dissolve. The emulsion is an ideal way particularly for small children. Do not mix with alcohol or acids, as these will develop the taste and odor of creosote.

It may be asked, may not guaiacol or its carbonate be used instead of carbonate of creosote. I think not. Thinking to test the matter I gave thiocol, a preparation of guaiacol, in one case, but my patient grew steadily worse as the disease advanced, until, after about three days, I substituted carbonate of creosote, and in twenty-four hours a marked mitigation of symptoms occurred. I have not had the courage or disposition to experiment further.

Dr. W. A. Vaughn, of Virginia, writes me that he has treated a number of cases with guaiacol or its carbonate and saw no material difference between them and cases treated expectantly.

Prof W. O. Bridges, of Omaha, Neb., gives a clinical report of cases treated with carbonate of guaiacol in which results were nothing like so favorable as I have seen and others have reported from carbonate of creosote.

I am aware that some gentleman, whose name and address have escaped me, has reported quite a number of cases treated with the two remedies indiscriminately and without noticeably different results. He spoke highly of the treatment.

Dose: To an adult I have been in the habit of giving seven and a half to ten grains or minims every three hours, in urgent cases giving the dose more frequently for a few times. Some have recommended one dram

night and morning, while others have put the daily amount at two and a half to three drams. Dr. Sanborn, whose report of cases I have given, gave one drop every hour. It may be that some of us are giving more than necessary and that better results may be had by giving smaller doses at shorter intervals. In some cases I formerly got good results from one drop of creosote alone every three hours.

Ordinarily I use the carbonate of creosote without other medication. I never use expectorants or nauseants. Occasionally a few doses of some anodyne are given in the beginning of painful cases, and strychnine where indicated.—*New England Medical Monthly*.

#### \*School Medical Inspection in Chicago.

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That school medical inspection is at last receiving the merited attention of enlightened school boards and health officers in our larger cities argues well for its future, and adds additional luster to the fame of those medical pioneers who first introduced and championed its cause in humanity's interests. This great aid to prophylaxis was foreshadowed in those admirable German laws which went into effect July 14, 1894, by the adoption of the Prussian Circular to the Royal Governors of Provinces, which concerns the closing of schools in the event of the occurrence of infectious diseases. The diseases and the laws pertaining to them are classified as follows:

1.—*a.* Cholera, dysentery, measles, rubella, scarlet fever, diphtheria, smallpox, typhus, relapsing fever, cerebrospinal meningitis; *b.* typhoid fever, contagious inflammation of eyes, itch and pertussis (while spasmodic).

2. Children suffering from these diseases are to be excluded from school.

3. Healthy children living in same house in which cases named in 1 exist—Exception: it must then be certified by a physician that the school child is protected from danger of infection by proper separation.

4. Children excluded from school for said causes may be readmitted only after the danger of infection has been removed according to a physician's certificate or the usual duration of the disease has expired. This, in the case of scarlet fever and smallpox, is six weeks, and for measles and rubella four weeks, from its inception. Regard must be paid to the thorough cleansing of the child's

person and clothing before readmission to school.

5. For the observance of orders 2 and 4 the principal or headmaster is made responsible. An immediate report of the exclusion of a child from school on account of an infectious disease must always be made to the local police authorities.

6. Refers to isolation of children attending boarding school when an epidemic occurs. It requires a physician's certificate to release them from quarantine, which he will give only when convinced that the danger of spreading disease is past and all precautions have been observed.

7. When any person living in the school house falls sick of one of the infectious diseases named in 1, or if a case should occur in the household of a school teacher, said case must be reported to the principal and to the police authorities, when proper steps must be taken to isolate the infectious case.

8. When several cases of infectious diseases, as in 1, appear in the locality where the school is situated, the principal and teachers must direct their especial attention to the purification of the school property, to the thorough airing of the class rooms. In particular must the school rooms and sanitariums be carefully cleansed each day. School rooms are to be aired continuously when not in use and the sanitariums must be regularly disinfected according to the regulations of the district police authorities. This rule applies to boarding schools and in them is extended to include dwelling rooms, work rooms and bedrooms of the pupils.

9. School rooms and entire schools where infectious diseases appear in epidemic form must be closed when the district physician advises.

10. Reopening is permissible only after thorough previous cleansing and disinfecting of the premises and on the advice of the district physician.

11. These laws apply as well to parochial and private schools, orphanages, asylums, day missions and kindergartens.

The foregoing laws, admirable in their way, have furnished the basis upon which most of our State and municipal bodies have founded their regulations appertaining to the same subject. They, however, fall short of the ideal, inasmuch as they do not provide for systematic daily medical inspection, and, to remedy this defect, the practical American rises to the occasion and medical inspection of schools is born.

The first attempt at this work was made



in the parochial schools of Philadelphia in 1889, but was discontinued on account of parental objection. To Dr. S. H. Durgin, of Boston, is due the credit of the first victory in this field. Beginning to agitate the question in 1890, he encountered much opposition, but, aided by Dr. C. M. Green, a member of the School Board, he succeeded in overcoming it. Following a serious epidemic of diphtheria he induced the board to sanction medical inspection as a regular department of school life. His important victory dates from Nov. 1, 1894. From that date to Oct. 31, 1896, there were individual examinations of 23,207 pupils, disclosing 6,571 cases of major and minor ills. Of them 5,818 were ill enough to be sent home, many of them suffering from markedly contagious or infectious diseases.

The importance of the work is also emphasized when the total school population of Boston at that time is considered. The figures show the presence of 71,495 pupils in the public schools and 11,808 in parochial schools. Roughly then, ten per cent. of these pupils required medical inspection, and it need scarcely be said that many cases of infectious diseases were thus promptly isolated, to the material benefit of the pupils in normal health.

Attracted by the excellent results shown in Boston, Dr. Charles F. Roberts, Sanitary Superintendent of the New York Bureau of Health, in October, 1896, sent recommendation to that body urging systematic daily examination of the school children by medical inspection of the Health Department, and, although preliminary investigation proved the immediate necessity for such work beyond the shadow of a doubt, the work was not regularly instituted until March, 1898. Thereafter in three months 63,812 children were examined by the inspectors, and of those 4,188 were excluded on account of contagious diseases.

About the same time the Chicago Health Department, through its regular medical inspector, working on notification of infectious diseases, received by the department from physicians attending the patients, during four months, visited 233 public schools, locating 1,417 cases of diphtheria and 306 of scarlet fever. Despite the urgent demand for such work, it was not until Dr. W. S. Christopher was appointed as a member of the School Board that that body acted upon the recommendations of the Health Department. A corps of fifty medical inspectors was appointed by competitive examination under Civil Service rules, and Jan. 8, 1900,

the work was begun. From that date to April 12, 1900, the inspectors examined 76,805 pupils, the school population at that time numbering 200,000. Of these 4,539 were found suffering from contagious diseases and excluded from school. Resuming September 17, the work was continued until November 8; it was resumed again from January 8 to March 1, 1901, and during this time examinations to the number of 56,562 were conducted, the exclusions numbering 3,398. Following are the figures of the Chicago Health Department covering diphtheria and scarlet fever for the year preceding medical inspection of schools and the first year under such inspection:

	1899				1900			
	Diphtheria.		Scarlet		Diphtheria.		Scarlet	
	Cases.	Dts.	Cases.	Dts.	Cases.	Dts.	Cases.	Dts.
Jan. ....	381	82	308	26	572	111	805	48
Feb. ....	307	62	377	41	362	88	505	47
Mar. ....	284	55	522	68	315	82	435	21
April ....	240	56	507	71	229	67	303	19
May ....	268	55	512	68	230	58	338	26
June ....	248	63	370	43	211	58	207	18
July ....	174	47	269	20	158	41	142	10
Aug ....	235	60	256	28	103	33	92	2
Sept ....	241	75	327	31	187	42	107	4
Oct ....	489	83	747	35	306	79	160	13
Nov ....	608	92	888	53	317	72	170	6
Dec ....	458	103	719	49	313	66	211	12
Total,	3931	843	5800	533	3303	797	3475	226

It is thus seen that a decrease in the number of diphtheria cases was 628 for the year, with 46 fewer deaths. In scarlet fever the decrease in cases was 2,325, with 307 fewer deaths.

These figures make even a better showing when it is considered that physicians as a rule were more careful in 1900 to report cases of this nature to the Health Department than in previous years, and the rapid growth of Chicago must also be taken into consideration. These facts add much to the excellent results shown in the foregoing table.

Viewed from the point of the economist, preventive medicine adds vastly to the wealth of the nation. Placing the low figure of \$1000 on the economic value of a human life, properly conducted medical inspection adds many hundred lives to the credit side of the nation's ledger every year, and thus proves one of the most profitable fields in which preventive medicine finds its work. At the same time the fact that it may be the saving the life of a Hippocrates, a Michael Angelo, a Wagner, a Robert Browning, a Morse, Edison, Lincoln or Gladstone should never be forgotten in estimating its potential value.

In Chicago during the early months of

medical inspection of schools, some objection developed on the part of parents who did not understand its aim, but this gradually died out and now the vast majority of them are very much in favor of it. One instance of the good work done through medical inspection exerted much influence with thinking parents. This occurred during the winter of 1900-1901 at the D. S. Wentworth school. Four children of the G— family—two boys and two girls—attended this school. The eldest child, a boy of thirteen, developed a sore throat. His parents, aided by the neighbors, made a diagnosis of "mumps." He was kept at home Tuesday and the remainder of the week, but not until Friday did they call a physician to see him. The boy was then moribund from malignant diphtheria, and died within 48 hours. His sister, aged ten, contracted the disease, but she recovered. The Board of Health was notified of the circumstances and immediately closed the three school rooms where the other children of the family had attended during the week. These rooms were then thoroughly disinfected and the throat of every child in each room examined. All suspicious throats had cultures made from them and the children were sent home pending announcement of the results. This thorough work was kept up for two weeks, but no more cases were discovered, and at the expiration of that time, the quarantine ceased. The foregoing is but one of many instances of a like nature where prompt and efficient medical inspection undoubtedly prevented the occurrence of an epidemic.

One of the most disagreeable duties of inspectors is to examine and exclude children afflicted with pediculi. One irate parent whose four children had been excluded from school kept after the writer for a month. During that time he complained to several members of the Board of Education, including its president. He also took the matter to the local alderman, alleging every reason but the right one as the cause of exclusion. These men took the matter up, but on learning the truth referred him back to his school principal and medical inspector. Finally he gave in and saw that his children had proper attention. They became models of cleanliness and were never again sent in for examination on that score.

In Chicago the branch of medical inspection is under the supervision of Mr. W. L. Bodine, Superintendent of Compulsory Education, to whom the medical inspectors are responsible for the proper discharge of their

duties. A daily report of cases examined and excluded is mailed by each inspector at the close of his day's visits to Dr. Arthur H. Reynolds, Commissioner of Health, and a copy is sent him also for transmission to Superintendent Bodine. In case of emergency, such as an outbreak of smallpox, diphtheria or scarlet fever, inspectors telephone immediately to both departments and thus no time is lost in establishing efficient quarantine.

Following is a copy of the instructions to medical inspectors, under which Chicago medical inspectors work:

The pupils to be inspected will be referred to the inspector by the principal for two reasons: 1. Those who have been absent four or more consecutive days.

2. Those in the school whom the principal may suspect to be suffering from contagious diseases.

These two classes must be kept separate in the reports.

The inspection is to be made with reference to transmissible diseases only, and examination is to be made for the following diseases; scarlet fever, diphtheria, measles, roetheln, smallpox, chicken-pox, tonsilitis, lice, ringworm, or other transmissible diseases of the skin and scalp, and transmissible diseases of the eye.

Scarlet fever cases must be excluded until desquamation has ceased.

Diphtheria cases must be excluded until throat culture shows the absence of Klebs-Loeffler bacillus.

Severe tonsillitis cases must be excluded on the clinical evidence alone, and throat culture made for further diagnosis.

Cases presenting suspicious throats, but not definite evidence of disease clinically, must have throat cultures made, allowed to return to their classes until the culture has been examined, and only excluded in case the bacteriologic examination shows exclusion to be necessary.

In making throat examinations the wooden tongue depressors supplied must be used, to the exclusion of all other tongue depressors. *Each tongue depressor must be used only once.* Aseptic methods must be employed in all examinations.

If a child is excluded, brief but sufficient reason therefor must be written on the exclusion card.

Inspectors are forbidden to make any suggestions as to the treatment or management of pupils who are sick. *This is imperative.*

Unlike Boston and New York, Chicago,

though fully alive to the value of medical inspection, has not as yet made sufficient provision for the permanent employment of its entire corps of medical inspectors. The emolument is \$50 per month and, to cover the ground properly, a man must devote his entire working morning to the service, i. e., from 9 A. M. to 12 M. When the appropriation runs low four-fifths of the inspectors are dismissed and an emergency corps representing the three major divisions of the city is selected from the eligible list. These inspectors do not make daily visits, but respond to special calls from a school principal when in his opinion local conditions demand attention. This method does not, of course, compare with the regular daily visits of qualified physicians, but seems to be the best that can be done by the School Board when financial stress is acute.

That feature of the Boston system relating to the discovery of infectious disease in the schoolroom, in which event the medical inspector orders the child sent home, reports the case to the Board of Health and follows the case home to see that it is properly isolated there, shows a defect in the Chicago system. When recovery is reported, in the former city, by the family physician, the inspector determines whether all danger of spreading the infection has ceased.

Another improvement might be adopted from the New York rules in this matter, viz., that provision requiring the principal or head teacher in charge to make weekly reports of the names and address of all absentees and, if absent on account of illness, naming the disease if possible. In Chicago such list might be handed to the local truant officer who has the right to enter the houses of all absentees, and he might then report his findings to the Commissioner of Health for further action.

Several years ago a New York paper suggested a valuable aid in preventing the spread of infection among school children, i. e., the separate wardrobe. This may be constructed of board, making each partition eight inches deep, or sufficiently large to separate the clothing of each child from that of his neighbor. A weekly cleansing or disinfecting of these wardrobes might be accomplished with but slight expense and most excellent results. This would prevent the spread of many parasitic skin diseases and minimize the spread of more formidable contagions.

Again, much better results might be had by enlisting the active cooperation of all the teachers in the work of detecting disease.

This might be accomplished by printing and distributing a placard such as Dr. Meredith Young, Medical inspector of Crewe, England, has originated for use in the local schools. It bears the caption: "Particulars of Certain Contagious and Infectious Diseases for the Guidance of School Teachers." A copy of this placard is hung in every schoolroom in the district. The diseases enumerated are divided into two classes, A and B. Those in class A include scarlatina, diphtheria, measles, rubella, mumps, pertussis, varicella, variola, and influenza. In class B are listed erysipelas, ringworm, disease of scalp, scabies, and purulent conjunctivitis. When diseases enumerated in the former class occur, all children living in the same house are excluded from school; in case of those in the second, class B, the exclusion of the actual sufferer alone is insisted upon.

In conclusion, one of the great aims of modern medicine is prevention; for it is written "An ounce of prevention is worth a pound of cure." And it is the endeavor of the Medical Inspector of Schools to live up to this adage. That he is doing so is acknowledged by all those who have given the matter thought, and when the history of Preventive Medicine, as practiced in the twentieth century is written, posterity will undoubtedly award a high place to the daily medical inspection of schools.—*Journal A. M. A.*

#### Smallpox and Vaccination.

The recent experience of the smallpox epidemic in London is interesting in the support that it gives to the conclusions drawn by experiences in this city that while vaccination is not an absolute preventive of the disease, it goes a long way toward lessening its severity. In a recent issue of the *London Times* the history is given of 349 cases that were said to be "completed"—that is, an end of the disease had come either through death or recovery. There were at that time quite a number of persons in the hospitals whose cases had not been completed, but who had passed through the worst stages of the disease and were on the road to recovery. For this reason the percentage of deaths in the 349 completed cases is greater than will be found to be true when the contagion has been finally stamped out and all of the cases have been brought under a complete classification.

Another fact which has to be taken into account in this London experience is that there does not seem to have been there as much attention in the past paid to revaccina-

tion as in this country. It is said that the evidence regarding this is small, and that out of the 349 cases eleven patients were said to have been revaccinated at different times, and in six cases the operation had been performed after the patient had sickened of smallpox, or a few days before the eruption appeared. The outbreak of the disease led in London, as it did in this city, to a very general resort to revaccination, and probably the fact that the disease found lodgment was due not only to the number of persons who had not been vaccinated, but to the number who had not taken the trouble to safeguard themselves by submitting to revaccination.

Of these 349 cases 233 had been vaccinated at some period in their lives, and of these forty-seven died, making a rate of mortality of 20 per cent. There were ninety-seven who were unvaccinated, and of these fifty-eight died, making the mortality rate in this instance 60 per cent.; while there were nineteen cases that were classified as doubtful, with eleven deaths and a mortality rate of 57 per cent. In the classification by age it was found that, out of a total of eighty-one children under 15 years of age who had the disease, twenty-four had been vaccinated and fifty-seven unvaccinated. Of the vaccinated children, only one died. Among those who had not been vaccinated there were thirty-eight deaths. These facts, it is believed, show the fatality of the disease among young children and the protection afforded by primary vaccination, first, against attacks, and, second, against the fatal results of these. From the age of 15 to 20 there were fifty-five cases, forty-one had been vaccinated, fourteen unvaccinated. Among the unvaccinated there was only one death, but seven, or just half, of those who had not been vaccinated died. The protection of vaccination to those above the age of 20 seems to have been somewhat less. Thus, ninety-nine of the cases recorded were between the ages of 20 and 30. Of these, eighty-one had been vaccinated, eighteen unvaccinated. Of the vaccinated eleven died, of the unvaccinated ten. Between the ages of 30 and 40 there were fifty-nine cases recorded, fifty-three vaccinated, six unvaccinated. Of these, twenty died, sixteen vaccinated, four unvaccinated. Over the age of 40 there were fifty-five cases, forty-one vaccinated, fourteen unvaccinated, and of these a fatal ending came in the case of sixteen of the vaccinated and thirteen of the unvaccinated, the rate of mortality in the last-named instance being terribly great.

In the classification of sex there appears to have been rather more males than females, an experience possibly due to the greater chances of exposure. But it is also worthy of note that the London experience apparently indicates that after the age of 50 the liability to smallpox seems comparatively slight, and among these London recorded cases there is not one in which the patient had reached the age of 70.

As we said at the outset, the value of a presentation of this kind is found in the support it gives to the conclusion that vaccination is a safeguard, the effectiveness of which it is the height of folly to deny. It is not an absolute defence either against the disease or its fatal ending, though the experience in England among those under 15 years of age, where only one died, and this a child of over 10, seems to imply that this safeguard under the best conditions is an exceedingly potent one.

Of course, if smallpox could be absolutely eradicated there would be no need of this defence against its ravages, but so long as a large number of people in the world continue to live under only partly civilized conditions, which admit of the continuance and extension of this terrible disease, the rest of mankind must protect itself in the best way that it can by those means of defence which medical science has provided; and in view of the fact that this defence is but a partial one, while those who are unvaccinated add by their presence and the probability that they will be struck down to the danger of their neighbors, the community has the right to insist in this instance upon compulsory methods which under other conditions might be looked upon as infringements upon personal liberty.—*The Boston Herald*.

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#### Musicians and Character.

By JOHN F. RUNCIMAN.

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To the man in the *bourgeois* back parlor, and to the woman also, any one who has any connection with the art of music is a musician. The personage who plays the organ in church, and the amateur lady who sings the solos of the anthems are alike musicians. There have been cases where the very bellows-blower considered himself a musician, and the best of the crowd. Prima donnas are musicians, even tenors are musicians; and there are social circles where the composers of tunes for the music halls are esteemed very great musicians. A few years ago there

appeared in the columns of a London evening newspaper an interview with one of these last gentry. His artistic achievements were known to me. He used to scribble a tune to verses provided for him: this tune was handed to another person to be harmonized and orchestrated for a music-hall band; and to do him the barest justice it was difficult to distinguish between any one of his tunes and any other. This gentleman was interviewed, and delivered himself to the following effect: That though he had heard of composers writing themselves out, it was hard for him to believe this possible; he himself had written some thousands of songs, and felt his invention as fresh and strong as ever. I know this "composer" to have amassed a substantial fortune by his labors and his ever-fresh inventive faculty; in music-hall circles, and the public-houses where the members of them foregather, he is spoken of with awe and the hope of the aspiring "article;" despite his hundreds of failures, it is thought that a melody from his pen will save any string of verses, however bald and inane, however banal and dirty they may chance to be. This interview was copied into many papers; and the people read and said "Amen."

So I begin; but before revealing the drift of my utterance, let me point out what a musician is in quarters where something better might be expected than is possible in *bourgeois* households. Take our English church organists, for instance. To them, Parry, Stanford, Mackenzie, Stainer, Bridge, and Dr. Turpin are musicians; to them, Purcell, Boyce, Jackson in F, Balfe, and Bishop are alike musicians. I do not know of any exhaustive life of Bishop or of Jackson, but, depend upon it, if there were one it would be read with intense respect, not to say actual reverence. Consider next the case of opera singers. To them Mozart, Verdi, Weber, Donizetti, Beethoven, Bellini, Mascagni, Wagner, Leoncavallo, Puccini, are all musicians. They do not know the plot of any one of the operas in which they take part. There is the famous story of the group of opera artists met at breakfast. They had all sung in *Trovatore*, and the talk—Heavens! such talk—turned on the subject. Not one of them knew what the opera was about. As old Dr. Johnson said of an actress: To them an opera is a thing in which their part occurs, as to a glove maker a piece of leather is a thing out of which he cuts a glove. The glove is the thing, and the part is the thing; the leather and the opera are only valuable because these things can be got from them. To the prima

donna the best opera is the opera which permits her to come most frequently to the footlights; the tenor finds the best opera to be that which gives him the greatest amount of applause,—bringing high B flats; and if the opera happens to be by Mozart—really, is it by Mozart?—then so much the better; and if it happens to be by Donizetti, the n nothing is the worse. A composer is a man who sets notes on paper, and there's an end on't. No; not quite an end. The very men who conduct operas are, to opera artists, musicians on the same plane with the greatest. Arditi, Bevignani, Flon, Motl, Pauri, Mancinelli—it is all one: all are musicians.

The amount of ignorance with regard to musicians and their various powers is appalling; the lack of judgment and of any standard of judgment with regard to musicians is appalling. I once went to a concert in a remote country chapel in my native Northumberland. After sundry songs, a gentleman in his corduroys appeared with a concertina and a hymn book. He played through some dozen verses of a hymn, giving, I was informed, each line, each word, its proper expression; and I was afterwards asked by another gentleman, who had left the plough or the pruning hook to attend the concert, whether I did not think the player "a grand musiker." That honest ploughman was in the same case as our *bourgeoisie*, as our Academic professors and church organists, as our opera singers. The journals they read are crammed full of anecdotes of the "musicians,"—Smith, Jones, Handel, and Robinson; the books they read, the "Anecdotes of the Musicians," are crammed full of precisely the same thing. The result is that the world has formed some preposterous notions regarding the characters of the genuine world musicians. For example, it is known that nearly all—I nearly said quite all—opera singers suffer from envy and jealousy; that scarce one will do a kindly deed for another; that nearly every one will go out of his or her way to do another an unkindness. Hence, a musician being some one who has something to do with music, it is reckoned inevitable that every musician should be cast in the same mould. Because most of our church organists have been and are decidedly dull and illiterate, the world thinks that the great musicians were dull and illiterate. And so on, and so on. And the final outcome of it all is that our everyday musicians set for themselves, and have set for them, the lowest standard of character the world has ever known. It is not expected that a musician should have any

intellect, any culture, any sense of how to behave himself in average society. If a man eats with his knife, he is excused—so he be a musician, whether teacher, pianist, singer, or fiddler; if he is not sure whether “*Paradise Lost*” was written by Shakespeare or Wordsworth, or if, having gained that little knowledge, which is a dangerous thing, he imagines Goethe to have been the librettist of Gounod’s *Faust*, he is excused—if he is a musician. His missing “h’s” are forgiven, and those in the wrong places overlooked—if he is a musician. We know how hard has been the fight for practitioners of music to get any social recognition whatever. In England the thing has been managed to a slight degree by men occupying positions in our “recognized institutions,” as those institutions call themselves. But when we see the members of the Incorporated Society of Musicians; when we hear them talk, watch them eat, look at the books and journals they read,—can we feel surprised that ordinary society looks somewhat askance at them? I, at least, should not care to have many, or indeed any of them as regular callers at my house.

It cannot possibly be held the duty of the world at large to read the biographies—not the foolish and generally apocryphal anecdotes—of the big musicians, with a view of finding out the manner of man a musician should be. The ordinary musician will continue to be treated as he is at present until he shows himself worthy of something better. It is his duty and his duty alone to study the lives of the biggest men and find out what they were, and, through making that discovery, be enabled to form a nobler ideal for himself. Unfortunately, too little is known of the characters of the earliest men, though the little we do know points to their having been cultured, strong, and able to hold their own with the “society” of their day,—the courts and courtiers, the lords, squires, squireens, and petty princelets. Palestrina, for example, cannot have been a greasy haunter of noisome taverns; the man who persuaded the pope and all the cardinals that the finest music of the Catholic Church could not be allowed to die must needs have had some force of character besides his mastery of music to get his way. The common school text-book statements may be brought up to controvert this conjecture; but then, the text-books are compact of nothing but lies. The notion that Palestrina inaugurated an entirely new style of music which overwhelmed the ecclesiastical potentates by its splendor and beauty can only be described as worthy of the text-books. He inaugurated

nothing; merely he continued on the lines of the old Flemings, his teachers. Depend upon it, there was considerable discussion behind the scenes before the solemn judgment in favor of the *old* style of music was delivered from the state, with due theatrical effect in public. A man of the kind who joins our Incorporated Society of Musicians would have achieved nothing in the extremely cultured age of Palestrina. This, however, is simply conjecture; but in the same age in England we find our great English composer, William Byrde, living on apparently equal terms with some of the mightiest men of Queen Elizabeth’s day. Certainly he did not eat with his knife, unless the nobility—as is probable—did the same. Later, Purcell was an intimate friend of Dryden.—Dryden, who was the pope of English literature.

Handel arrived, a man we know to have been thoroughly educated. He did not only live on equal terms with kings, queens, and the aristocracy, he ruled them; they feared him. Bach, at the same time in Germany, had little to do with kings, though when he met Frederick the Great he was treated with infinite respect. Beethoven, with his many uncouth habits, cannot exactly be described as refined, but he was a great reader, the friend of dukes and archbishops, and also, be it remembered, of Goethe. Finally, in Wagner we find the very antipodes of the musician of the common imagination. In every sense thoroughly educated, widely read, he would have been treated with universal respect even had he been without his enormous musical endowment.

In short, we find the characters of the great musicians to be utterly different from those of the musicians of the anecdotes and the half penny newspapers. English church organists are and nearly always have been dull dogs, but the big men are not dull dogs. Opera singers are generally ignorant, dull, jealous, and vain; and it is just therein that they differ from the big men.

Even if I had never heard a note of the music of some of our London musicians, I think I should have inferred from their actions that it would be bad music; for never yet came great and noble work from a small, ignoble soul. No singer, one may say, would sing worse if he purged himself of the common attributes of a singer; no player would play worse if he were better educated. Is it not time that both players and singers began to repent them of their sin and ignorance, and set out to live their lives with a higher ideal before them? There is much to be gained and nothing to be lost.—*Abstracted from Musical World.*



### Some Obstinate Bladder Cases.

By GEORGE W. HOPKINS, M. D., Cleveland, Ohio.

John C., age 31. Occupation, patrolman, following exposure, patient experienced bladder symptoms as follows:

Frequent urination, tenesmus, hypogastric pain and a temperature of 101.4 degrees.

The urine was scanty, turbid and loaded with mucus.

Diagnosis: Acute cystitis.

Treatment consisted of rest in bed, restricted diet, anodynes for the tenesmus, diluent and alkaline drinks.

The acute symptoms promptly subsided but the urine continued abnormal despite the general measures employed and the internal administration of urinary antiseptics.

Irrigations with boric acid solutions of varying strength proved unsatisfactory, as did also solutions of potassium permanganate and silver nitrate similarly applied.

A twenty per cent. solution of Glyco Thymoline was then substituted for irrigation, and the improvement was marked and continuous until recovery was perfect.

Harry R., age 43. Occupation, book-keeper. Had a history of bladder trouble of several years duration.

His urine was blood tinged and loaded with mucus.

Microscopic examination revealed an abundance of ammonia, magnesium phosphates, numerous disintegrating pus corpuscles, blood corpuscles and blood shadows.

Repeated examination with the sound gave negative results, but a skiograph taken with a high vacuum hard tube revealed a small calculus which had persistently evaded the sound in previous examinations. Lithotomy was performed, the calculus removed but the urine failed to return to normal.

Irrigation in turn with boric acid, potassium permanganate and silver nitrate solution proved unsatisfactory.

Glyco Thymoline irrigations proved satisfactory from the start and recovery was ultimately perfect.

William L., age 55. Occupation, saloon-keeper. Had a history of repeated attacks of gonorrhoea which were never appropriately treated.

Urine was voided with great difficulty, at frequent intervals and loaded with mucus. Reaction was alkaline and the microscope revealed an abundance of amorphous phosphates of calcium and magnesium, flat epithelial cells, disintegrating pus corpuscles and indigo crystals.

Examination confirmed diagnosis of chronic

cystitis due to urethral stricture and hypertrophied prostate.

Catelectrolysis by the slow method removed the calculus and Bottini's operation relieved the enlarged prostate, but the urine failed to clear up as desired.

The cystoscope showed marked changes in the bladder walls but catheterization of the ureters yielded negative results.

Appropriate urinary antiseptics were administered internally and silver nitrate solutions by vesical irrigation with only slight improvement.

Irrigation with twenty per cent. solutions of glyco thymoline gave early, and continuous improvement until recovery was perfect.

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### News and Abstracts.

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Will physicians who have had experience with cases of ectopic pregnancy please communicate with Dr. H. F. Twitchell, 10 Pine street, Portland, Me.

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#### Meeting of the National Conference of Charities and Correction.

The residents of Portland and many influential citizens of our State most earnestly desire to have the National Conference of Charities and Correction meet in Portland during the summer of 1903. There is a widespread belief through the State that we are not doing all that we ought to do in behalf of our defective, dependent and criminal classes. We desire to know what has been accomplished elsewhere. We wish to meet experts in these various lines of charitable work and to learn all we can from their investigations, experience and study. The meeting in our State of the men and women composing the National Conference of Charities and Correction, many of whom are eminent specialists in charitable and correctional work, will give an impetus and an uplift to this work in our State, such as we can obtain in no other way.

Portland offers exceptional advantages for the National Conference of Charities and Correction, with its charming location on Casco Bay, its commodious hotels, its unexcelled electric car service, its fine public halls, etc., etc. The National Conference has not been held in New England since the New Haven meeting, in 1895, and has never been held east of Boston. No doubt its members would be glad to visit Maine, the Vacation State and the Playground of the Nation. Our people would receive the members of the Conference with unbounded cor-

diality, and would give them a welcome they would long remember.

#### The Nathan Lewis Hatfield Prize for Original Research in Medicine.

The College of Physicians of Philadelphia announces through its committee that the sum of Five Hundred Dollars will be awarded to the author of the best essay in competition for the above prize.

Subject: "The Relation between Chronic Suppurative Processes and Forms of Anæmia."

Essays must be submitted on or before March 1, 1903.

Each essay must be typewritten, designated by a motto or device, and accompanied by a sealed envelope bearing the same motto or device and containing the name and address of the author. No envelope will be opened except that which accompanies the successful essay.

#### The American Congress of Tuberculosis.

The third annual session of this Congress is announced to be held on the 14th, 15th and 16th of May, 1902, at the Hotel Majestic, 72d street and Central Park, West, in the City of New York, in joint session with the Medico-Legal Society. There will be two sessions each day and no evening session, except on the 15th, when the banquet will be given. This will enable delegates from distant States and countries to enjoy the amusements and attractions of the city.

Arrangements will be made with railway companies for a reduced rate of fare, the details of which will be announced to the delegates.

#### The Prevention of Ophthalmia Neonatorum.

In an article on the prevention of ophthalmia neonatorum Dr. Lucien Howe, of Buffalo, (*Philadelphia Medical Journal*, January 18, 1902,) whose name is so prominently identified with this subject, urges the enactment of laws which will make it compulsory upon the practitioner to adopt some form of prophylaxis against this disease, which is responsible for so many cases of blindness. He cites statistics by Kostling, showing that in 17,000 births where no prophylactic treatment had been employed some trace of ophthalmia developed in over nine per cent., whereas in 24,000 children treated by the Crede method the number who developed the disease was only one-half of one per cent. The Crede method, however, has the disadvantage of always producing some pain and

usually more or less conjunctivitis, while in a few instances it has given rise to corneal ulceration. According to the statistics of Piotrowski, in 1080 children treated with a strong solution of boric acid and a ten per cent. solution of protargol not a single case of ophthalmia occurred, while slight catarrhal conjunctivitis was observed in only 1.2 per cent. Aside from the numerous favorable reports on the value of protargol as a prophylactic against this affection by European authors, the drug is preferred for this purpose by many ophthalmologists in this country, including Drs. Alt, Peck, Cheney, Fox, Hotz, Zimmermann, Converse, and Todd. In commenting upon Dr. Howe's paper the *Philadelphia Medical Journal* remarks editorially: "If we cannot reach the fons origo of ophthalmia neonatorum, we can at least save the offspring from a life of darkness, and protect the community from a source of burden and expense. That this can, to an enormous extent, be accomplished by prophylactic instillation need hardly be repeated, and its negligence constitutes a sin of omission that deserves commensurate punishment. The enactment of such a law is feasible, its interpretation obvious, and its enforcement not difficult, provided the accoucheur receives the intelligent support of an intelligently instructed community."

#### An Atlas of Clinical Medicine.

Jonathan Hutchinson, F. R. S., General Secretary of the New Sydenham Society, has requested Messrs. P. Blakiston's Son & Co., of Philadelphia, the American agents of the society, to announce the publication of "An Atlas of Clinical Medicine, Surgery and Pathology," selected and arranged with the design to afford, in as complete a manner as possible, aids to diagnosis in all departments of practice. It is proposed to complete the work in five years, in fasciculi form, eight to ten plates issued every three months in connection with the regular publications of the Society. The New Sydenham Society was established in 1858, with the object of publishing essays, monographs and translations of works which could not be otherwise issued. The list of publications numbers upwards of one hundred and seventy volumes of the greatest scientific value. An effort is now being made to increase the membership, in order to extend its work.

POLITE.--"Quite polite, isn't he?"

"I should say so! He is so polished that he can't tell the plain, unvarnished truth."  
—*Tit-Bits*.

# Phillips' Emulsion

50% best NORWAY COD LIVER OIL  
minutely sub-divided,  
WITH WHEAT PHOSPHATES (Phillips')

Pancreatized, Palatable, Permanent, Miscible in Water, Milk, Wine, etc.

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for correcting Hyperacid conditions—local or systemic.  
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Good health comes with proper food.  
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Samples and Literature to Physicians upon request.

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Antiseptic, germicide and antigonorrheal remedy, containing 15% of silver, twice the amount of any other silver proteid. The gelatose molecule is very much smaller than is that of albumin, and this fact allows of a more ready and thorough penetration of the tissues. Because of the greater silver strength, a lesser percentage solution is needed to destroy the various forms of bacteria, 0.1 to 1.0 per cent. being used, according to indications. This fact very materially lessens the cost of treatment also, a not unimportant item.

Albargin is not precipitated from solutions by hydrochloric acid, sodium chlorid solution, nor does it coagulate albumin, thus building an impossible barrier to the antiseptic virtues of silver. This product seems to possess all the requirements of an ideal antiseptic for the treatment of gonorrhea, eye and ear conditions, as well as throat affections where a remedy of this character is indicated. Surely Messrs. Victor Koechl & Co., of New York, are to be congratulated in possessing as agents, so promising a remedy.

This firm have also the Valerianic acid diethylamid, known by the trade name, Valyl. Experiments show Valyl to possess all the virtues of valerianic acid and valerian when at its best, unfortunately seldom, as the varying conditions of Valerian make its use very uncertain.

Valyl is offered in gelatin capsules each containing 2 grs. with an equal amount of olive oil, and is recommended in hysteria, functional heart disturbances, migrain, hemi-crania, neuralgia, and painful menstruation.

**Eosinophile Leucocytes and Nuclein Bases.**

Edward T. Williams says that eosinophile leucocytosis is associated not only with the formation of spermine crystals, but with all the nuclein bases in the blood, marrow, glands, organs, tissues, or excretions. This fact has been demonstrated in at least four of the principal eosinophilous diseases, to wit, leucocythæmia, asthma, helminthiasis, and trichiniasis. Spermine crystals were found in splenic leucocythæmia by Charcot over forty years ago; in asthma by Salter, in 1860, though he did not know their chemical composition; in trichiniasis by Thayer and Brown, in 1897, but "guanine" crystals were found in trichinous pork by Virchow forty years earlier. Ankylostomiasis and several other worm infections have been shown to be characterized by eosinophilia and the presence of spermine crystals in the fæces. The

presence of nuclein bases in eosinophilia proves that there is a decomposition of nuclein going on somewhere within the body. But nuclein is to be found only in nuclein-bearing cells. Nuclein-bearing cells, then, are undergoing decomposition in eosinophilia. The author suggests that these decomposing cells are the eosins themselves.—*Boston Medical and Surgical Journal*.

**The Medical Director of the Louisiana Purchase Exposition.**

The important post of Medical Director of the St. Louis World's Fair has been filled by the appointment of Dr. Leonidas H. Laidley.

**Grippal Cough-Laryngitis-Bronchitis.**

In these affections, antikamnia is indicated for two reasons: First, because of its absolute power over pain, at once removing this element of distress and placing the whole system in the best possible condition for a speedy recovery. And second, because of its power to control inflammatory processes, lowering the fever by its peculiar action on the nervous system. Codeine is strongly indicated because of its power as a nervous quietant, often quickly and completely controlling the cough. In nervous coughs, irritation of the throat, laryngitis, bronchitis and phthisis, where the cough is altogether out of proportion to the amount of expectoration, Antikamnia-Codein tablets will give prompt satisfaction. In fact, in cases of nervous coughs, irritable throat, so commonly attendant upon influenza and la grippe, as well as in sub-acute laryngitis, and slight bronchitis, this tablet alone will often so control the cough that the disease rapidly subsides. This is not strange when we remember that nothing could keep up this irritation more than constant coughing. In the more severe cases of bronchitis and in phthisis, the patient is not only made more comfortable, but the disease itself is brought more directly under control by checking the excessive coughing, relieving the pain and bringing the temperature down to the normal standard.

If all is true that is testified before the Ways and Means Committee, Cuba's best course is to appeal to Spain to come and deliver her from the tyranny of the United States.—*The Philadelphia Ledger*.

WHY HE WEPT.—*First office boy*: "Wot's Chimmy crying for?"

*Second office boy*: "His grandmudder's dead and going ter be buried on a holiday!"  
—*Puck*.

THE BEST RESULTS ARE ASSURED IN BROMIDE  
TREATMENT WHEN YOU SPECIFY  
**PEACOCK'S BROMIDES**

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NEUROLOGISTS and General Practitioners prefer it because of its superior qualities over the commercial salts. . . Each fluid drachm represents fifteen grains of the combined chemically pure Bromides of Potassium, Sodium, Ammonium, Calcium and Lithium.

DOSE: ONE TO THREE TEASPOONFULS, ACCORDING TO THE AMOUNT OF BROMIDES REQUIRED.

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### Dysmenorrhea.

In congestive types of dysmenorrhea, in which the painful menstruation is usually due to some inflammatory condition of the pelvic organs, especially the uterus, much benefit is derived from intra-vaginal applications that will relieve the engorgement of the parts. Tampons soaked in glycerine and boric acid, or iodine or ichthyol have been largely used for this purpose, but this has only been in the absence of something better, since the inconvenient and disagreeable nature of the tampon treatment has always been recognized. The modern way of accomplishing the same purpose is a far more efficient, cleanly and convenient manner is by the use of Micajah's Medicated Uterine Wafers.

They are easily introduced into the vagina, are unirritating and do not require removal. Their ingredients are gradually liberated, exerting an astringent, antiseptic and antiscarrhal action upon the congested and inflamed parts. The congestion is relieved, the circulation regulated, the absorption of exudates promoted, and the dysmenorrhea thus permanently removed.

### Agglutination Test for Human Blood.

By F. N. WHITTIER, M. D., of Brunswick, Me., Professor Bacteriology, etc., Bowdoin College.

I have been much interested in your editorial notices of the agglutination (or precipitation) test for human blood.

I have had occasion to use this test in an important medico-legal case and find it very satisfactory. This case (State of Maine vs. Henry Lambert) has just been tried at Dover, Piscataquis County, Me. The respondent, Henry Lambert, was charged with the murder, May, 1901, of J. Wesley Allen, of Shirley, Me. The respondent was also charged with the murder of the wife and daughter of Mr. Allen. The remains of the murdered family were found in the ruins of the farm buildings, which had been burned, presumably to cover up the crime. After a trial lasting over two weeks, the jury brought in a conviction. Evidence of a large pool of blood was found on the greensward between the house and barn. The State wished to determine whether or not this blood was consistent with human blood. The amount of blood and the average size of corpuscles indicated that it might be human blood. The agglutination test gave positive results, a precipitate appearing immediately in a solution of the blood upon the addition of the blood serum of a rabbit previously "immun-

ized" by subcutaneous injections of human blood. The rabbit serum gave no precipitate in solutions of horse's blood, cow's blood, rabbit's blood or guinea pig's blood. It gave marked precipitates in solutions of fresh human blood and dried human blood. The technic used was practically the same as that given by George H. F. Nuttall in *Journal of Hygiene*, Vol. I, No. 3.—*American Medicine*.

### An Up-builder in Post-grippal Cases.

Very many of our readers know, by reputation, at least, Dr. A. H. Chmann-Dumesnil, one of the foremost physicians of St. Louis. From a letter of recent date we are permitted to quote the following, which we do with pleasure. "I needed a roborant, and took, with much benefit to myself, Hagee's Cordial of Cod Liver Oil Compound. Since then I have had occasion to use it in a number of cases of grippe, and in all of them the results were of the best. The action of this preparation is rapid and thorough; and in a remarkably short time a case is recovered. It is certainly the remedy par excellence for this now prevalent affection.

In a number of post-grippal cases in which enteric neuralgia, bronchial involvement, and a number of nervous symptoms manifested themselves I have found this preparation equally effective. It is an excellent up-builder, and rapidly restores to its former condition the weight which has been diminished by the waste of tissues consequent to grippe."

This is certainly very high praise and from an eminent authority.—*Massachusetts Medical Journal*.

Dr. J. A. Knight, of Eatonton, Ga., in a recent essay on smallpox declares that Echthol is a very efficient antipurulent which has served him remarkably well in the treatment of that disease. Not only this, but he also says that if given early it will abort the disease and render immune those who have been exposed. Physicians interested can obtain Dr. Knight's essay by writing to the Battle & Co., Chemists Corporation, St. Louis, Mo., and this firm will send samples of Echthol to any physician who desires to try it as an antipurulent.

OVERHEARD AFTER MEETING.—"De preacher say dat de worl' comin' ter a end in thirty days."

"Dat bein' de case, dey ain't a nigger in de country dat'll pay house rent in advance."—*Atlanta Constitution*.



Wherever it is necessary to improve the quality of the blood or desirable to increase the weight of the patient

## EXTRACT OF RED BONE MARROW

is the preparation indicated. One to four teaspoonfuls well diluted with cold still or carbonated water, milk or beer three to four times a day.

---

**ARMOUR & COMPANY**  
CHICAGO

### A Lesson from the Masters.

The study of the practice and teachings of the really great men in medicine is a fruitful source of knowledge and practical guidance in the management of disease. Two principles are clearly recognizable; first, that Nature possesses the ability to successfully combat the acute infectious diseases without the necessity of resort to powerful drugs for the relief of symptoms; second, that treatment is most successful which is most simple and which has for its object the reinforcement of Nature's methods of antagonizing the encroachment of the disease processes. The application of these principles constitutes the most successful methods of treating influenza, pneumonia, bronchitis and the numerous winter diseases associated with inflammation of the respiratory organs.

One method of treating these conditions is by administering a powerful and, in truth, a depressing drug for practically every symptom, e. g. opium in some form, to control cough, a cardiac and metabolic depressant to reduce fever, stomach-disturbing remedies as expectorants, etc. This plan of treatment is, authorities assert, antiquated, irrational and ineffective. On the contrary it is a matter of absolute fact, proven by experience, that if a patient with pneumonia, influenza, severe bronchitis, is properly nursed, given adequate easily assimilated nourishment and be given Gray's Glyc. Tonic Comp. in dessert to tablespoonful doses every three or four hours, that patient will withstand the attack much better and be surprisingly free from the pronounced depression which accompanies and succeeds these diseases. This plan of treatment has also the great advantage that the patient is spared the baneful effects of excessive drugging.

Gray's Tonic not only fortifies the patient's strength, aids digestion and assimilation, but has an unquestionable influence in palliating the symptoms of respiratory inflammation.

THE PURDUE FREDERICK CO.

15 Murray Street, N. Y.

It is thirty years since Dr. Samuel H. Durgin was originally appointed on Boston's board of health, and meanwhile he has remained at its head and has put our health department at the head of the municipal health organizations of the country. There have been few city officials to whom Boston owes a greater debt of gratitude for intelligent and efficient service than it owes to Dr. Durgin, and his reappointment by Mayor Collins is a deserved recognition of this fact. —*Boston Herald*.

### The Medical Profession and Wall Street.

Addressing the alumni of the City (Charity) Hospital of New York recently, Mr. Charles M. Bergstresser, editor of *The Wall Street Journal*, commenting on a recent disaster to the fortune of a well-known doctor by speculating in Wall street, said: "A physician ought not to speculate on a margin account in Wall street. The physician should be an investor, paying outright for the securities he buys and buying only the best. He of all men cannot afford to have his peace of mind disturbed by the dangerous risks of Wall street. Part of the healing process in the patient's mind is the cheer of the doctor's countenance, unruffled by the harrowing cares of a losing speculation in Wall street. It is right, however, that a doctor should devote some time each day to a study of investments and keep posted on markets, so that he, too, may take advantage at times of beneficent laws operating there. One law is that value governs prices. When, therefore, the price of a good security is distinctly below value, it is right that the doctor should avail himself of that knowledge and make his own money work as it should in yielding him the best possible returns at a minimum of risk. Physicians, as a rule, have little money to lose, but they all have enough money to make them use it with the same diligent attention to its welfare as they give to the activities of their profession. Their money is simply their own labor stored up. It should not be neglected."

The photograph of the reformer presented by himself and accompanying his infallible method of dissipating the evils of the world, to which is added the proof that all others are wrong and the reformer alone has the truth and right—such is the demonstration that morbid egotism may make an ass of a man. Such pamphlets and books appear almost daily upon our review table—one now before us contains a dozen or more pictures of the author.—*American Medicine*.

HIS BUSINESS.—*Cast A. Way*: "Yes, madam, I've been a solicitor for nigh twenty years."

*Mrs Farmkins*: "A solicitor?"

*Cast A. Way*: "Yes'm, I solicits bread an' meat."—*Tit-Bits*.

RUSHED.—*First Millionaire*: "I've been frightfully busy this week!"

*Second Millionaire*: "Is that so?"

*First Millionaire*: "I haven't even had time to give away any money."—*Puck*.

# Listen to This!

"The remedy which has undoubtedly been of more use in the treatment of consumption than any other is in reality a food—**Cod-liver Oil.**"

PROF. JAMES TYSON, M. D.

**Food** alone contains the "powers of life." Don't wait till Consumption has such a grip on your patient that he can't shake it off. Commence the fight now, by **feeding** him a thoroughly pre-digested and palatable preparation of Lofoten Cod-liver Oil in the form of **HYDROLEINE**. It is the **best defense** against any tubercle bacillus.

**The CHARLES N. CRITTENTON CO.**

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THE ALKALINITY OF BLOOD SERUM

## GLYCO-THYMOLINE

(KRESS)



Birmingham Nasal Douche.

### A PURGATIVE *For Mucous Membrane*

INDICATED IN ALL CATARRHAL CONDITIONS, ESPECIALLY

## NASAL CATARRH

"Glyco-Thymoline (Kress) is well adapted for the treatment of catarrhal conditions of the mucous membranes. I have frequently employed it with benefit in nasal, buccal and bronchial affections. Direct local medication is of much advantage in these cases. In some instances we may safely depend on topical measures alone; in those where internal treatment is also necessary, Glyco-Thymoline (Kress) proves an excellent adjuvant."

MEDICAL BULLETIN, Phila., Pa., March, 1899.

**SPECIAL OFFER**

A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges.  
**K & O Douche to physicians, 15 cts.; \$1.50 per doz. Retail 25 cts. Remit stamps.**

**KRESS & OWEN COMPANY, Chemists, 221 Fulton Street, New York**

**HASTENS RESOLUTION AND FOSTERS CELL GROWTH**

Gout and rheumatism is often a puzzle which many physicians have to solve with more or less satisfactory results. While defective elimination is the important factor, in both diseases, the skin, bowels and more particularly the kidneys are generally at fault. From this it is plain that any successful remedy must assimilate or oxidate and also eliminate the waste matter from the system.

The Tri Iodides Henry, is a very successful combination indicated in all rheumatic disorders. The efficiency of the Iodides is well-known in blood taints and they are also the most useful in rheumatoid pains of tertiary syphilis, etc.

Tri Iodides Henry, is an alkaline combination of colchicin, phytolaccin, sodium salicylate and hydriodic acid, and is specially indicated as an alterative, in syphilitic, rheumatic, lymphatic and visceral disturbances. It is a powerful uric acid solvent and a reliable eliminant in diathetic diseases, and is synergistic of the salicylates and iodides. It is a very safe iodine alterative indicated where the iodides cannot be tolerated.

**EDDYISM DEFINED.**—The influence of Mrs. Eddy is infinitely harmful. It is literally derationalizing thousands of people. It is remorselessly separating husband and wife, parent and child. It is turning from the pursuit of knowledge and steeping in the superstition of the Middle Ages, untold thousands. It is the mother and promotor of a new-old witchcraft, which has so taken possession of the minds and lives of many people that they live in constant terror of its believed baneful work. Unless you know it to be a fact, as I do, that, right here in the city of Boston, there are hundreds and hundreds of people living in the confident belief that the malicious minds of others have the power to cause, and are causing, disease and death and all forms of domestic, social and business disaster, it will be difficult for you to believe it. This belief amongst Christian Scientists has reached the proportions almost of panic. (*An Address by Frederick W. Peabody, Esq.*)—*Phil. Med. Journal.*

I have no hesitation in saying that I consider Peacock's Bromides invaluable, and have for years used it exclusively in my sanatorium when bromides were indicated. Commercial bromides are crude and rank as compared with Peacock's. The greatest danger of injury to the patient and the product lies in substitution. I now only buy from my wholesale druggist in dozen lots.

ALLAN MOTT RING, M. D.

Arlington Heights, Mass.

N. J. STATE PRISON HOSPITAL,  
TRENTON, January 4, 1901.

MARTIN H. SMITH Co.,

No. 68 Murray St., N. J.

Being constantly in the treatment of a considerable number of phthisical hospital patients, it is in order for me to state, that in the persistent cough so harassing to the patient, and preceding or accompanying pulmonary hæmoptyses or hemorrhage, I have found Glyco-Heroin" (Smith) an invaluable remedy, applicable in the vast majority of cases of phthisis pulmonalis, and far preferable to combinations of morphia or codeia or any other of the heroin compounds which I have tested.

Under above conditions Glyco Heroin (Smith) may be satisfactorily relied on to answer indications.

I also found this happy combination exceedingly valuable in the troublesome, dry so-called stomach cough following la grippe, and supposed to be dependent on irritation on the pneumogastric nerve.

CHAS. BREWER,

Resident Physician N. J. State Prison.

#### Radium—A Remarkable New Element.

The *Indian Lancet* reports that a meeting of the Astronomical Society, held in Paris, M. Becquerel gave a description of the extraordinary properties of the new element, radium. This body, when brought into the light, shines with a brilliancy surpassing that of the electric arc. So bright was the light given by the piece shown, that it was clearly seen through the speaker's coat. But the most extraordinary quality is that no waste can be determined, and to explain the mystery recourse has to be had to the old emission theory of light, which, long ago, was thought to have been exploded. Radium thus appears to overthrow many scientific theories, for its luminous radiations appear to be produced in the same way as the emanations of musk. Radium, however, as it costs in its production £2,000 (about \$10,000) per gram—that is 15½ grains—is not likely soon to come into common use as a light-producer. The experiment was conducted with a piece weighing one grain and a half.

**HER SINGING.**—*Daisy*: "What do you think? Clarice went out and sang at an entertainment to a private insane asylum."

*Edie*: "Did she say whether they showed their insanity much?"

*Daisy*: "Oh, yes; they encored her three times."—*Tit-Bits.*

THE SELECTIVE INFLUENCE OF

# GRAY'S Glycerine TONIC Comp.

upon the respiratory tract is indisputable. It allays the cough and respiratory distress of bronchitis, winter cough, pneumonia and influenza. It invigorates the whole system too.

THE PURDUE FREDERICK CO.,

No. 15 Murray Street, New York.

**PERPLEXITIES**  
*in the Treatment of Diseases of Women*

are readily overcome by the use of  
**MICAJAH'S**  
*Medicated Uterine*  
**WAFERS**

Their ANTISEPTIC, ASTRINGENT and ALTERATIVE action renders them of especial service in congestions and inflammations of the mucous membranes of the Genito-Urinary tract.

Sig: Insert Wafer into the vaginal canal, up to the Uterus, every third night, preceded by copious injections of HOT water.  
 LIBERAL SAMPLES AND BOOKLET "HINTS ON THE TREATMENT OF DISEASES OF WOMEN" SENT GRATIS BY MAIL.

**MICAJAH & CO. WARREN, PA.**

ESPECIALLY INDICATED  
 IN

- Gonorrhea
- Vaginitis
- Vulvitis
- Leucorrhoea
- Endometritis
- Granular-Os
- Urethritis
- Cytitis
- Uterine Displacement
- &c. &c

**PROFESSOR MAX SCHULLER'S VIEWS ON MALIGNANCY.**—J. E. Blake reviews the recent work of the German professor entitled "Die Parasiten in Krebs," which in turn recounts the results of eighteen months' recent experimentation upon the parasite of cancer. The technical steps followed are given in detail. The substance of the conclusion reached may thus be stated: An organism has been isolated which can be grown in pure culture, which can be readily identified through its peculiar form, color and mode of development, which occurs invariably in tumors, and which produces the same by its inoculation. There would, therefore, seem to be no reasonable doubt that these are the elusive parasites which have been so long sought. Whether any of the organisms previously described as occurring in tumors can be identified with the one here described, we do not know; but it is certain that this cannot be identified with blastomycetes or any other organism which grows on ordinary culture media, and is tolerant of a temperature that very rapidly proves fatal to the one just described. It apparently belongs to a class of animal parasites of which practically nothing is known. Certain researches of the author would tend to show that non-malignant tumors are produced by somewhat similar parasites belonging to the same class, and that under certain conditions these are either transformed into the malignant form or assume malignant qualities, which result in the same proliferation of cells as that caused by the described forms. But of this too little is known to say anything definite.—*New York Medical Journal.*

#### Sanmetto in Genito-Urinary Diseases.

Dr. B. G. Inman, of Bradford, Ohio, writing, says: "I have used Sanmetto and find that it is all that one could desire in the treatment of urinary diseases. With an experience of thirty-eight years of practice I know of no medicine that is more direct in its action in all cases of senile prostatitis and other genito-urinary diseases. I regard Sanmetto as one of our best vitalizing tonics to the reproductive organs, which gives it a wide range of usefulness in the treatment of many nervous troubles."

**WHAT WE ARE COMING TO.**—*Workingman's Wife* (in 1910): "What's happened, Danny?"

*Her Husband* (desperately): "Well, I've been fired by J. P. Morgan, and there's nobody else in the world to work for!"—*Brooklyn Citizen.*

Cod liver oil seems to be a natural food for bone marrow. Scott's Emulsion, a reliable preparation of cod liver oil, is often of great use in relieving anæmic conditions especially the chlorosis of young women. That anæmic blood should regain its color without the administration of iron only reminds us of the fact that ordinary food contains all the iron the system needs and probably the only form of iron the system ever really absorbs.

**How It's Done.**—*Medical Student*: "People don't want young doctors. How on earth do they get started?"

*Professor*: "It's simple enough. They just sit in their office and fret and worry over the rent until their hair turns gray, and then the patients come with a rush."

**"JUST AS GOOD."**—The point that strikes us most forcibly in this matter is the amazing impudence of it all. That we, who, as physicians, with the highest standard of ethics of any guild of men, hold our heads so high, should submit to having our prescriptions censored by a set of worthy tradesmen, some of whom claim, and the majority repudiate, a place among the learned professions! Suppose Apothecary Green really believes Jones' Elixir identical with Brown's, is he, therefore, to take the liberty of altering the doctor's orders without first securing permission? The meekness of the profession under such presumption is inexplicable. Bearing in mind the heavy responsibility on the doctor's head, how can he for a moment permit the slightest variation from his orders? Never mind if the drug is "just as good." The precedent once made will be quickly followed, and sooner or later disaster must follow. If the druggist knows best, what need of the doctors at all?

We take our stand on the simple principle that it is the doctor's right to order just what he considers suitable for his patient, and the druggist has the plain duty of filling the prescription exactly as directed or refusing to fill it at all. Nothing can be plainer. No other ground can be occupied by the two.—*From Editorial, Alkaloidal Clinic.*

I am more than pleased with the physiological action of Seng in the treatment of chronic indigestion. It seems to nicely restore the action of the stomach, re-establish perfect digestion and its good effect is quickly evidenced by the general improved appearance of the patient.

J. CARL LUDWIG, M. D.

Cincinnati, Ohio.



Preparation—Par Excellence

**“Fellows’**

**Syrup of Hypophosphites”**

CONTAINS

Hypophosphites of

Iron,

Lime,

Quinine,

Manganese,

Strychnine,

Potash.

Each fluid drachm contains Hypophosphite of Strychnine equal to 1-64th grain of pure Strychnine.

**Offers Special Advantages**

in Anaemia, Bronchitis, Phthisis, Influenza, Neurasthenia,  
and during Convalescence after exhausting diseases.

*Dr. Milner Fothergill wrote: “It (Fellows’ Hypophosphites) is a good all-round tonic, specially indicated where there is NERVOUS EXHAUSTION.”*

**SPECIAL NOTE.**—Fellows’ Hypophosphites is *Never sold in Bulk*, and is advertised only to the Medical Profession. Physicians are cautioned against worthless substitutes.

Medical letters may be addressed to

MR. FELLOWS, 26 Christopher St., New York.

LITERATURE OF VALUE UPON APPLICATION.

### Division of the Fee.

The giving and taking of commissions has been repeatedly decried and the consensus of opinion among honorable men is that, unlike charity which "blesses him who gives and him who takes," it debauches both. That the practice is growing there can be no doubt. The peddling of cases from surgeon to surgeon by "drummer physicians" who make a trade of their profession, caring less for the ability of the operator than for the percentage he gives, is ordinarily dwelt upon at length. It is clear, however, that the consultant surgeon or specialist who gives a commission is equally culpable. He defrauds the patient, places himself in the power of the case-vendor, and does himself a great injustice. He defrauds the patient by charging him for something he does not give. The surgeon is called to the case in question because of his supposed superior knowledge and operative ability. For the exercise of this knowledge and ability he has a right to command a fair price, but anything added to this, for the "drummer," is nothing more nor less than obtaining money under false pretenses. He puts himself in the power of the case-vendor the moment he bribes this individual to send him a case. Bribe-givers and bribe-takers are equally guilty in criminal courts, and they are equally despicable according to the code of ethics which governs the actions of all honest practitioners. The bribe-taker may at any time, either by intention or indiscretion, bring justly merited disgrace upon the unprincipled operator. No self-respecting surgeon can afford to hazard his reputation in the hands of such a bartering auctioneer. The percentage demanded by the case-vendor can be gradually increased, and the operator, having taken the first wrong step, must compete with other men as dishonest as himself. The injustice done the operator is a justly merited punishment, since he allows a third party to receive pay for the exercise of his own ability. The essential wrong, however, is that the patient is defrauded. As we stated some time ago, the question simply resolves itself into this: Does the patient know of the transaction? If so, then it is legitimate and ethical; if not, it is collusion.—*Journal of the American Medical Association*.

A GENTLE HINT.—"I hope you appreciate the fact, sir, that in marrying my daughter you marry a large-hearted, generous girl?"

"I do, sir, (with emotion); and I hope she inherits those qualities from her father."—*Tit-Bits*.

INSANITY, CRIME AND THE MEDICAL EXPERT.—Medical diagnosis is, after all, a nice balance of probabilities rather than possibilities. Consequently it behooves the medical expert in cases such as we are discussing to appreciate that the public at large, outraged by the commission of a heinous crime, bears with natural impatience attempts to shield the perpetrator of such crime on the plea of irresponsibility based on purely theoretical considerations or upon wire-drawn sophistry.

It is a perfectly laudable ambition to elevate the standards of psychiatry from the almost miry stratum in which they have lain for many years to the scientific levels to which they deserve to attain, but if to accomplish this there must result a serious clash between science and sterling common sense, it appears inevitable that opprobrium will be cast upon the profession and that strict justice will not always be accorded.—*Medical News*.

Dr. Risus Sardonius says that when you see a man makin' a good deal of clothes, puttin' on frills and slingin' style you may be sure that he has need of those things. If he was better equipped in brain power he could dispense with devotin' most of his emergies to keepin' up appearances. Good wine don't need no bush.

NEEDED.—"I recommend to future generations," said Uncle Nathaniel, as he put away his bandana handkerchief, "that they encourage the growth of two noses—one to take cold in, the other for general use."—*Harper's Bazar*.

The recent announcement from England that a case of cancer, supposed to be hopeless, had been cured by applying a decoction of violet leaves has been widely published by the lay press, and there has made apparently "much ado about nothing," as a writer in the London *Lancet* regards the reported cures as occurring in cases where cancer did not exist at all: and as for the violet leaf, it was recommended by the medical writers of the age of the Plantagnets for many ailments.

Truly, it seems that there is nothing new under the sun so far as the relation of herbs to human ailments is concerned.—*The Medical Summary*.

NOT UNUSUAL.—"A problem novel? What's the problem?"

"There are several, but the one that arrests the attention of the thoughtful reader is, 'How in the world did the author ever manage to get a publisher?'"—*Life*.

# Journal of Medicine and Science.

ISSUED ON THE TENTH OF EACH MONTH.

In the Interests of Public Health, and in order that the People of Maine may reap the great Benefits, both hygienic and economic, assured by a judicious Application of the Principles of Preventive Medicine, this Journal supports the following Propositions and urges Physicians and Laymen to work diligently to further their Consummation.

- 1st. The Establishment of a Sanatorium for the Treatment of the Consumptive Poor.
- 2nd. The Abolishment of the Coroner System and the Appointment of Medical Examiners.
- 3rd. The daily Inspection of School Children by School Physicians.
- 4th. The more liberal Endowment of our Medical Schools by private Charity, and the voting of larger Appropriations to our State and Local Boards of Health.
- 5th. The Establishment of a State Bacteriologic Laboratory.

For, surely, health is the prime essential to success in life, and the health of the people is the foundation upon which all their happiness and all their power depends.

Vol. VIII.

PORTLAND, MAINE, MARCH, 1902.

No. 4.

## Original Articles.

### \*The Pathology and Etiology of Cancer.

By W. B. SMALL, M. D., of Lewiston.

**I**T HAS fallen to my lot to introduce to you the subject of the evening Carcinoma, (or cancer as it is more commonly called) and tell you something of its causes, and try to explain to you in a brief way what it is.

The word "Cancer," while the more common term, is very vague in its meaning and does not convey a definite idea. It is often used to designate any malignant tumor, sarcoma, epithelioma, carcinoma, or even any more or less early cachexia, capable of producing death. Its proper application to carcinoma is the only use that I will make of it tonight.

Our bodies are composed of cells, each with its own duties to perform. These duties are too many and varied for us to mention in detail. Some merely transmit impulses received from others, some act only when called upon to do so by such impulses, while some (and it is largely these we are interested in tonight) are more active, being in glandular structure. All of these cells have work to do, when they are in their normal condition.

To produce a tumor, an abnormal growth from this normal tissue, the primary cells must assume, in the place of the habit of work, the habit of growth. It is according to the extent of this change of action from work to growth that we get the various grades of tumor formation, from the most benign to the most malignant. What is the origin of this change, what starts it, is the question now before those who are trying to find the cure of cancer.

Carcinoma is of great interest to the Medical Profession because it has been thus far classed as an incurable disease, (except by the surgeon's knife) and not capable of prevention.

To show how interesting this question has been in the past few years, permit me to review the many and varied opinions which have been expressed in the medical articles during that time. In seeking to learn the causes of cancer attention has been directed to the matter of climate, soil, race, age, sex, occupation, heredity, alimentation, other diseases, in fact every thing that can possibly have any bearing or influence on its true cause. Cancer seems to be distributed by stagnant water or by floods, by the use of such water for domestic purposes, by eating uncooked vegetables, such as salads and celery, by contact with existing cancerous tissue, or by blood-sucking insects, as well as various other less well established methods.

\* Paper read at the Fiftieth Stated Meeting of the Maine Academy of Medicine and Science, held Feb. 10, 1902.

Cancer is of local origin. Heredity as a factor in etiology is generally considered unimportant. In every 500 cases of cancer where careful investigations were made and the question of heredity was given the benefit of every possible doubt, less than five per cent. was found where it was claimed that there had been a history of cancer in the family.

That cancer is not a disease of the poor and poorly nourished is shown as follows: 1. The improvement of the condition of the people in England has doubled in the last 150 years, poverty is one-half less; but cancer has increased four fold. 2. The mortality from cancer is least among the poor and greatest among the rich. 3. In Ireland, where people are as poor now as 50 years ago, cancer has not increased. Williams gives overnourishing and an easy life as predisposing causes. In rich West London the cancer mortality is twice that in the poor district of East London, while among savages it does not exist. Of 325 cases of cancer in females, none were in prostitutes; and of 160 cases only one patient had had syphilis.

Limestones are associated in England and Wales with the lowest mortality from cancer, and flooded clays with the highest.

Cancer is a disease which is on the increase. This increase has been more marked in some localities than in others. In England and Wales during the past twenty years death from cancer has more than doubled.

In New York State, cancer is the only disease tabulated which shows a progressive and steady increase. In Buffalo in that state it is especially prevalent. The greatest increase in this country is in San Francisco.

It is believed that this increase may be in part due to the excessive consumption of meat of late years. Statistics show that more than double the amount of meat is consumed at present than there was 50 years ago. Insufficient exercise and deficient fresh vegetable food may also have an influence.

Clinical observations of this disease during the past few years have demonstrated the fact of cancer localities, cancer streets, cancer houses. With most observers, these new facts are overshadowing the older belief in the hereditary theory of the disease. The contagion, epidemic even, of certain forms of cancer seem to have been established, and when we consider all these facts now known in regard to this disease, and

the role that microorganisms play in the production of other infectious maladies, it seems but reasonable that we should look for some microbe of cancer. It may be that one microbe may not be able to produce all varieties of cancer, but one kind having been found others will soon be discovered to account for the action of growth taken on by these working cells.

That we may the more easily trace the action and growth of these aberrant cells, let us take, as an example, cancer of the breast.

The active cells that form the gland are the ones first involved. As I have stated, under the stimulus of some special excitant, these cells depart from their usual duties as workers, and take on the action of growth, still maintaining the normal characteristics of the normal cell. In the early stages the cells in contact with the basement membrane of the gland, are arranged with a certain kind of regularity but at a later period they are more irregular, filling in the lumen of the ducts, the centre of the acini, and the connective tissue of the parts outside the basement membrane. Thus we see that not only is the original glandular structure changed, but it spreads beyond the original bounds, and invades and replaces the fibrous, muscular, and even the bony parts of the adjacent tissues. This spreading beyond the original bounds of the kind of cells first involved and the destruction of other kinds of tissue, marks the boundary line between benign and malignant growths.

All new growths, abnormal as they are, are liable, like normal tissues, to certain pathological processes, and cancers are obedient to this law. Thus, they may inflame and suppurate, ulcerate, or undergo chronic degenerate changes. This ulceration may be either superficial or deep, producing crater-like cavities, with hard, irregular and everted margins, the base being formed of unhealthy, sloughing granulations of cancer tissue covered with thin, icherous, sanious, offensive discharge. No fungus ever forms. Severe and repeated hemorrhages, readily controllable, however, by pressure, are not uncommon. Early in the disease, although incapable of detection by the touch, the axillary lymphatic glands become involved in fully 85 per cent. of cases supposed before operation to be free from this complication.

These glands, having become "cancerous," form masses which compress the brachial plexus and vessels, causing intense neuralgic pain and oedema of the upper extremity.

From the axillary glands the disease spreads to the supraclavicular region. This invasion of new tissues through the lymphatic channels is the most common way in which cancer spreads. It also spreads by continuous or local infection, and by secondary or vascular infection, through the blood currents, lighting up growths in the viscera and other parts of the body.

Whatever changes do occur, follow a comparatively rapid course, for more than half of all the cases of cancer of the breast have run their course within three years. Cancer in some other tissues is even of shorter duration.

While researches have been going on for several years in the attempt to find the true cause of all these processes, it is only since 1896 that any real progress has been made, or any general agreement has existed among observers as to what relation the things seen bore to cancer.

In 1896 Leopold of Dresden described cells in carcinomatous tissue which showed independent amoeboid movements. His assistant Rosenthal, found in fresh carcinomatous tissue, beside the usual fatty granular and hyaline cells, uniformly round bodies filled with yellowish, angular, or oval granules of a glistening appearance.

These granules appeared to move about in the cells and to actually escape into the surrounding fluid, where they swam about in the most lively way. This movement was very peculiar, the granules circulating among themselves as if in active ebullition. When not closely crowded together the granules dance about here and there and up and down within the cell cavity. Upon watching these granules for a sufficient time, suddenly, at some spot on the periphery, one would escape, followed soon by others, without the appearance of any break in the cell membrane. The active play of the granules occurred for hours, until, in some instances, the cells would become empty and the surrounding fluid filled with actively swimming granules. At last only the shell of the cell and occasionally the nucleus remained. Confronted by these most interesting observations, the question naturally arises as to whether these peculiar bodies are a component part of the carcinoma cells or veritable parasites. Leopold answers by saying that either some chemical affinity from without produces this movement and escape of the granules, or they possess within themselves this motive power. In the latter event they are quite likely to be cocci or parasites in process of sporulation. At the

conclusion of Rosenthal's first report from Leopold's Clinic he left this question in doubt.

Leopold now makes a further communication, having conducted individually since his last report extensive experiments upon this interesting subject. He has obtained pure cultures of blastomycetes (the scientific name of these granules just mentioned) from human carcinoma which have been transplanted experimentally into animals and apparently have produced malignant growths from which this organism was again recovered. If Leopold is able to confirm without question these observations it is one of the concluding and one of the great discoveries of nineteenth century medicine.

To absolutely confirm Leopold's theory and disarm scientific criticism, malignant new growths must be produced experimentally by the injection of pure cultures. Only by this means will the chain be perfectly completed.

The work of other observers tends to show that the transplantation of cancer is possible and is, in more respects supporting this theory more and strongly. With this question settled much more rapid strides may be made in the cure of this dreadful disease.

Having in mind the progress of medical knowledge in the past, the apparently unsurmountable obstacles that have been overcome, I feel certain that a remedy will be found, sooner or later, which will be radically curative.

If cancer is of parasitic origin, the cure may be greatly simplified, for certainly some agent will be discovered which will destroy these germs without endangering the life of the patient.

#### **\*Some Modern Methods of Diagnosis of Cancer, with Particular Reference to Cancer of the Stomach.**

By A. K. P. MESERVE, M. D., of Portland.



TO discuss the present methods of diagnosis of cancer as it occurs in the various tissues and organs of the body, would consume more time than has been allotted to this brief paper, so that what follows will in the main, refer to cancer of the stomach.

Some of the early symptoms of cancer of the stomach are, pain, loss of appetite, constipation, debility, emaciation, cachexia, acid eructations often of foul smelling gas, nausea,

\*Paper read at the Fiftieth Stated Meeting of the Maine Academy of Medicine and Science, held Feb. 10, 1902.

vomiting, tumor, and several of these symptoms occurring in a patient between the ages of forty and seventy years should, if persistent or long continued, always lead to a careful physical examination in all the ways known to the profession, viz:—by inspection, palpation, percussion, measurements, chemical and microscopical examination of the contents of the stomach, etc., to determine the exact site and probable character of the lesion.

The patient, divested of clothing should lie in bed upon a mattress with the region of the epigastrium and abdomen exposed. Notice first the color of the skin, whether pinkish, pale or sallow; the appearance of the superficial veins of the abdomen whether more prominent than common, the contour of the two sides, whether one is more prominent than the other, and whether any wave of contraction can be seen to pass over the region of the stomach. It is well to remember, while making this examination, that the larger part of a healthy stomach lies to the left of the middle line of the body, the pyloric end alone extending to the right. A tumor or enlargement of right side one inch or more above and to right of umbilicus, enlargement of veins over abdomen or epigastrium and the wavelike motion of the stomach all point to some obstruction of the pylorus. Palpation if systematically and carefully performed by the physician applying the open hands to the abdomen with gentle pressure at first to determine whether there is tenderness in the epigastrium, and, later deep pressure with the palmar surface of ends of fingers will aid in determining whether there is a tumor or swelling under the parts palpated. If a tumor is found the question of its character becomes one of great interest as tumors in right hypochondrium may be from impacted stones in, or cancer of the gall bladder, from growths in the pancreas, from tubercular infection of omentum or mesenteric glands, from cancer and phantom tumor of the bowels, or from a displaced kidney. To diagnose these different tumors percussion comes in as an aid to palpation. In percussion the stomach may be filled with air or water which will displace a tumor of the pylorus downward and to the right, and increase the resonance of dullness over the stomach as the case may be. In impacted gall bladder the tumor is usually dull on percussion, the dullness being continuous above with that of the liver, the tumor also is higher up and further to the right than is that of the liver, and is less movable upon palpa-

tion, but rises and falls in respiration. Cancer of the pancreas can be differentiated by its fixed character and by the jaundice which usually accompanies it. In tubercular disease of omentum or mesentery, rather movable nodular masses may be generally felt, and more than one can generally be made out, and if of long continuation ascites is usually present. In cancer of transverse colon the tumor is usually more resonant on percussion, although if obstruction exists great dullness may be caused by fecal matter gathered above the obstruction. Phantom tumors are usually resonant upon percussion, disappear suddenly only to be felt at a later period, and are generally found in nervous females. A displaced kidney may be found in almost any part of the abdominal cavity, it is usually movable, has a generally spheroidal shape and by careful manipulation, aided by deep and slow breathing by the patient, can generally be returned to its place.

Early in the disease, when the subjective symptoms are more marked than the objective, of which we have been speaking, chronic inflammation of the stomach gives pain after eating, anorexia, nausea and vomiting, but these occur much sooner after ingesting food than they do in cancer, moreover large quantities of acid mucus are usually vomited in connection with undigested food. Gastric ulcer gives pain, vomiting, frequently of blood, tenderness upon pressure, acid eructations, pallor of skin, but not the cachectic appearance of cancer.

The pain and tenderness are generally more marked in ulcer than in cancer, and more readily located. Ask a patient with cancer where the pain is, and usually the whole hand will be placed over and below the epigastrium, while in ulcer frequently the point of one finger will be placed over the painful spot. The blood vomited in ulcer is larger in amount and less changed; if hemorrhage has been copious, as it frequently is, black masses of blood can be found in the stools. Vomiting in ulcer occurs soon after taking food, is smaller in amount, (unless blood is present) and contains undigested food, while in cancer with obstruction often a large quantity is ejected containing the food taken for several days more or less digested, and often accompanied by changed blood, "coffee ground vomit."

Differentiating now in recapitulation the signs and symptoms mentioned, the pain in cancer is somewhat dull and peculiar in character, occurs more frequently from two



and one-half to four hours after taking food, and continues when stomach is empty, is more persistent, the loss of appetite is more marked than in other diseases, debility, emaciation and cachexia are early symptoms, often showing before any attention has been called to the stomach, slowly increasing with added pallor, often resembling pernicious anemia. From this, however, it can be differentiated by a blood count, the number of red blood corpuscles in a cubic millimeter never approaching the diminution found in the latter disease (1,000,000), while in cancer with extreme emaciation and weakness it is rarely, if ever below 2,000,000 to the cubic millimeter. The nausea and vomiting are less frequent, but more persistent than in ulcer or gastritis, the amount ejected at one time larger and differing in character, as stated. The tongue is usually thickly furred and pasty in cancer, while in ulcer it is red with a stripe in middle.

Obstruction at the pylorus is the most common cause of a dilated stomach. This latter condition can be made out by partially filling the stomach with water and by percussion, passing a stomach probe also may give valuable testimony by length of tube passed, and occasionally feeling the end of probe through the abdominal parietes sometimes as low as two inches below the umbilicus, requiring a length of tube twenty to twenty-four inches.

If a tumor is felt, and the different sources already mentioned can be eliminated, the question of cancer or ulcer with inflammation and thickening of pylorus becomes more difficult than any other condition mentioned, but here, fortunately, modern research comes to our aid by an examination of the stomach contents under certain known conditions. To test the acidity of the secretions of the stomach, the stomach tube should be passed in the morning before breakfast, if nothing can be expressed with the aid of the patient, and if when irrigated only clear water escapes, the stomach is in normal condition, if any fluid can be obtained it should be tested for free HCl. it indicates ulcer or nervous acid dyspepsia. After the stomach is washed out a test breakfast, consisting of a roll and a cup of weak tea without milk or sugar may be taken and in one hour the tube again introduced and the contents expressed and tested for free HCl. by the Phloroglucin Vanilin test. If free HCl. is absent the test for lactic acid will probably give a positive reaction, which would very strongly indicate cancer, while the presence

of a positive reaction for HCl. would almost as surely exclude it.

While the pyloric orifice is the most common seat of cancer of the stomach, it may attack any part of the organ. In cancer of the cardia, difficulty of swallowing exists, the bolus frequently being regurgitated, the seat of the pain is high up under the sternum, and the stomach probe is arrested at the cardiac orifice. In cancer of the greater curvature thickening or nodular masses may sometimes be felt along a transverse line near the umbilicus. The cachexia is as marked in these forms as in that of the pylorus.


Lastly a microscopic examination of the matters vomited may show tumor particles or cancer cells readily distinguishable from the healthy epithelium, or the Oppler Boas bacillus may be found strongly indicating, but not pathognomonic of carcinoma. This bacillus first described by Oppler in 1895 is a small threadlike bacillus, non-motile, is present in a large majority of cases of cancer of the stomach, thrives in lactic acid media and disappears if HCl. is present.

Cancer of the stomach is also a non-febrile disease, while some slight rise of temperature occurs in ulcer and gastritis.

#### \*THE TREATMENT OF CANCER.

By C. E. WILLIAMS, M. D., of Auburn.

*Mr. President and Fellows of the Academy:*

 THE object of this paper is to note what may be found by way of encouragement from a survey of recent literature regarding the curative treatment of that dreaded disease—cancer—the bane of the medical profession and the bliss of quacks for many, many years.

While from time to time many remedies have been proclaimed as curative, the hope held out has been shortlived, and discouragement has increased with each disappointment.

Senn sums up the results of medicinal treatment as follows: The experience of centuries from the internal use of innumerable remedies has demonstrated that so far carcinoma has not been materially influenced for the better by this method of treatment.

Dr. Abbe writes: The profession stands

\*Paper read at the Fiftieth Stated Meeting of the Maine Academy of Medicine and Science, held 1902.

ready to welcome any thought that sheds new light upon this universally dreaded disease, the study of which from both the obscurity of cause and the uncertainty of treatment, is still an unsettled problem.

The medical treatment of cancer in the past certainty has not been encouraging.

Yet, from the fact that quinine has been found to be a specific for that general parasitic disease, malaria, we may hope to find an internal remedy for cancer if it, too, proves to be a parasitic disease. Or, remembering the wonderful effect of diphtheria antitoxine, we may hope for help from serum therapy.

Before considering direct treatment let us see if anything may be hoped for by way of prevention. As cancer frequently arises from prolonged irritation, something may be done, some cancers prevented, by promptly relieving such conditions as appendicitis, biliary calculi, ulcer of the stomach, etc. In discussing the relation of gallstones to cancer, at a recent meeting of the London Pathological Society, Dr. Rollinson reported having made a special study of this question, and said that Voelker found that seventy per cent. of primary cancers of the gall bladder had calculi, while Ziegler found calculi in ninety per cent. In a series of cases of secondary invasion of this organ, only twenty per cent. had calculi. He, therefore, concludes that quite a percentage of such cancers are caused by the calculi.

Early and exact diagnosis, which is becoming more possible as each year brings its advance in medicine, will enable the physician to advise timely relief of such conditions, thus preventing a certain, though small percentage of cancers.

Again, knowing that a harmless growth may in time take on a malignant condition, some cancers may be prevented by promptly removing all such growths.

The use of cocaine and other local anæsthetics with a better knowledge of the use of caustics and cautery favor such treatment.

Regarding the surgical treatment of cancer, Abbe recently writes: "Following the line of progress in modern scientific surgery, it is reasonably certain that at some future day, perhaps within our time, there will be a more certain understanding of cancer, and a more certain cure for it. But today we have only one promising method of cure—eradication of the apparent area of disease, either by knife or caustics."

Senn says: "The early and radical operation offers the only prospect for permanently

eliminating the disease. These statements imply the fact that cancer is at start a purely local disease.

Hundreds of cured patients are living today, many years after successful excision of the tongue, lips, breast, and so on; but in the majority a recurrence is the rule.

A sufficient excuse for bringing surgical treatment into the department of general medicine and therapeutics is that nearly all cases such as have been mentioned, are seen in their early stages by the general practitioner, and upon him devolves the responsibility of the management of the case during that time in which treatment is most promising. If surgical aid is to be curative rather than palliative, it must be invoked while patients are, in most cases, acting under the advice of the general practitioner.

From the fact that the early and more extensive operation is being advocated by surgeons and accepted by patients, encouragement as to cure rather than palliation is to be found.

The disease being at first limited in area, the removal of more tissue than that immediately concerned in the growth should, and practically does, give a smaller percentage of return growths.

The question of early diagnosis and removal is receiving very encouraging attention, so that, as should be the case, physicians are coming to recommend consultation where operation is considered, at the first appearance of the growth in the breast and uterus.

Barker has given this rule for operative treatment: "The less extensive the disease the more widespread should be the operation;" meaning that only temporary relief can be hoped for unless the operation is done early and all possibly infected tissue, including related glands, be removed.

But cases of hemorrhage at or near the menopause, so suggestive of cancer do not always receive the prompt attention they demand. Many women are led to think that such disturbances are to be expected at that time, and therefore, are of little consequence. The same may be said of troubles about the gall bladder, stomach and duodenum.

Surgery of this region is making decided advancement and should be considered in all such troubles.

Treatment by electricity has made encouraging advancement, and there is hope that, from its effect to cause medicines in solution or ointments to penetrate the tissues,

cures may be obtained when the nature of cancer and the actions of medicines upon the abnormal structures are better understood.

Much is now being done by way of healing superficial cancers from the use of the X-ray, and more positive results are to be expected. The advantages of this method of treatment are that it causes no burning, or sloughing and that its use is not attended with pain. Its disadvantages are that the apparatus is heavy and expensive, great care must be exercised and treatment must be continued for weeks.

Morton says that the influence of the X-ray for the healing of tissue is a positive fact which he has verified time and time again in practice. He thinks from cases yet under consideration that there is hope from this form of treatment which we cannot afford to ignore.

Remedies for cancer are being sought for in numerous directions and successes reported, but to only one more method of treatment do I wish to call your attention, the effect of organic extracts.

Abbe writes: "In studying this new field of thought one cannot be unmindful of the result of disease of even so minute an organ as the pituitary in acromegaly, or of the suprarenal gland in Addison's disease, or of the marvelous control of thyroid extract in myxœdema."

Though the principal advancement in organo-therapy has been made in connection with surgery, it offers so much encouragement in the way of general treatment that I venture to enter somewhat into details.

Beatson, surgeon to the Glasgow cancer hospital, thinks with Klebs that cancer epithelium is a form of ovum cell, and believes that ovarian influence causes normal epithelium to change to germinal epithelium in the active process of mammary cancer.

From this standpoint his suggested method of treatment of this disease is based upon observations made in Australia, where cows are spayed to prolong lactation indefinitely.

In normal lactation the epithelium which lines the mammary lobules and ducts, undergoes rapid and enormous cell proliferation followed by degeneration. The cells involved in this process are of the identical epithelium which undergoes hypertrophy in cancer of the breast, the apparent difference being that in cancer the epithelium continues to grow, instead of breaking down as in lactation. By experiments on small animals he found that, after the ovaries were removed, lactation continued as long as suckling

lasted. When this was stopped, excessive deposits of fat took place throughout the body.

He ventured to practice this theory in a case of recurrent cancer of the breast, and had such startling results as to convince him that the ovarian influence over the epithelial growth in the breast is a permanent one.

Boyd has tabulated over forty cases where the ovaries were removed for mammary cancer, showing comparative success in thirty-five per cent., at least one of which remained well for three years and a half.

This measure of success reported in October, 1900, has seemed to be maintained during the past year. Abbe of New York, has reported several cases in which remarkable improvement followed oophorectomy, showing prompt and wonderful results in otherwise hopeless cases. His first case was that of a woman forty-two years old who had recurrence in the scar tissue and pleura, and in the opposite breast and gland after the radical operation. Her condition was considered hopeless.

The ovaries were removed, and in a week changes were noticed in the scar tissue; in two weeks the nodules were becoming pale and flattened, and improvement continued up to the time of reporting the case, four months after the operation, when there was no trace of malignant element anywhere. An interesting fact in this case is that the growths disappeared in exactly the order of their occurrence.

A still more wonderful result was obtained in his second case, that of a woman seventy years of age, whose breast had been removed two years before for typical cancer. She had recurrence in the form of nodules, of which there were six, and a large malignant ulcer, in the scar tissue. The ovaries were removed and the patient was given no medicine whatever.

At the end of the first week improvement was seen in the ulcer granulations. During the third week the ulcer, which was simply cleansed with boric acid solution and covered with rubber tissue, began to cicatrize, and in eight weeks was entirely healed.

Three months after the operation the ulcer remained healed and the nodules were slowly disappearing.

Such wonderful results cannot be expected in all, or even the majority of cases, but as nearly all so far have been otherwise hopeless, an improvement, even in thirty-five per cent. of the number gives us the most encouraging results yet reached by any method of treatment.

Since such positive results are produced upon cancer by removing from the system an organic substance, may we not hope that in time we may discover some substance which, introduced into the system, as thyreoid substance for myxœdema, or antitoxine for diphtheria, will relieve cancerous conditions in any part of the body.

Dr. W. E. Elwell, of Togus, in opening the discussion, said :

*Mr. President and Fellow Members of the Academy:*—I did not expect to be called on to open the discussion upon this very important subject which has been so ably presented this evening. It seems to me that the practical point, in the present status of our knowledge, is that we should be able to make an early diagnosis in cancer, and, unfortunately, this is often a difficult matter.

Cancer may exist for months and the patient himself not suspect it, and he is so little discommoded that sometimes he does not consult a physician until it is too late. Many patients have gone on in something like this way and have died and the fact that they had cancer was only revealed at the autopsy. In other cases both patient and physician have failed to recognize early the gravity of the disease. There is no one symptom or procedure which can be depended upon in all cases to establish the diagnosis. The most reliable is the chemical test for the presence or absence of free hydrochloric acid, and some patients object so strenuously to the passage of the tube and the washing out of the stomach that even this test is not always available.

Though, as I have said, an early diagnosis is often difficult in deep seated cancer, yet later, after the pain, the emaciation and the cachexia are prominent, it is recognized, but then it is too late to more than relieve the symptoms and the hydrochloric and lactic acid tests serve but to add certainty to the conclusion.

If it were possible for us to look in and see the first nodules of the disease in the walls of the stomach the surgeon could give as early relief as in cancer of the lip or the breast, but in deep seated cancer we cannot see and watch the local manifestation of the disease, and we are not sure of our diagnosis until later.

In the late stages of this disease about all the physician can do, with our present knowledge, is to relieve the distressing symptoms and make the patient more comfortable.

We relieve the pain with morphine, regulate the diet, and employ the stomach tube to wash out the stomach. This latter procedure gives so much relief that many patients learn to use it, and can then get along on a minimum dose of morphine and often they live fairly comfortable for months and sometimes for years, provided there is no stenosis from the disease invading the pylorus. Some employ an antiseptic in lavage, but simply washing out the stomach generally gives a great deal of relief.

In the treatment of this disease, we have one ray of hope, aside from the future possibilities of antitoxin serums, and that is the use of the X-ray. During the past few months many cases have been reported in medical journals, in which, in suitable cases at least, good results have followed the use of the X-ray in the treatment of malignant growths. Of late I have tried the X-ray in several cases of malignant growths, though I have not yet had an opportunity to use it in cancer of the stomach. I recall one case of cancer of the groin, deep seated, and in which the growth was the size of a cocoanut, and which, I have no doubt, at the time I saw it, was a case of inoperable sarcoma. The patient suffered great pain and had almost lost the use of the limb. After the third application of the X-ray for ten minutes the pain left and since then the tumor has shrunk until today it can hardly be detected. The man has gained in health and flesh and cachexia has disappeared. In another case, which was more desperate, I succeeded in relieving the pain, but little other improvement was noticed. Reports of such cases as these, and there have been many in the medical journals, certainly lead us to hope that we may in the future have more effectual means at our command in fighting this deadly disease.

All of us have had "freak" cases of cancer of the stomach. I remember one case in which the patient vomited, every once in a while, large masses of cancerous growth, and then would improve for a time, but finally the case ended fatally.

Another fact in connection with cancer of the stomach is that the autopsy generally shows that the disease has extended to other organs, and often the liver, the omentum, the œsophagus are found infiltrated, and sometimes the lungs and more distant organs.

The views of etiology are interesting, but unproved, though they tend lately to ascribe it to a parasitic origin. Other good observers contend cancer is due to an overdevelopment of the normal tissue cells due to some

inherited or acquired abnormality of the system,—that it is an abnormal growth of cells due to faulty innervation or nutrition of a part. Removal of the ovaries certainly influences some cases of cancer of the breast, and this fact would seem to back the advocate of the latter view.

President E. M. Fuller of Bath, said :

*Mr. President and Members of the Maine Academy:*—I do not propose to take up much time this evening, and I will try to touch upon points not alluded to by the other speakers.

The papers of the evening have been classical and have given in a scientific way the history and the accepted theories of the causation of this disease. So far as my own experience goes I believe cancer to be due to some microorganism as I also believe that many more diseases not now classed as germ diseases will finally be found to be due to bacteria or parasites. If we could find some germicide that would kill these germs and could be used with safety, I feel that we should be able to cure many more diseases. In the future tubercle bacilli will be controlled as well as we now limit the action of the bacillus of typhoid fever, and we all hope that we will be able soon to deal with cancer in a similar way.

I do not understand that the theory advanced by Dr. Williams combats this other theory. The ovaries may furnish a secretion which enables microbes to do their work. We know that there is a fight going on continually between bacteria and leucocytes and that so sure as we can increase and fortify the leucocytes, we increase the chances of the patient of recovering.

Another point, so-called whiskey drinkers and beer guzzlers are much more apt to develop cancer of the stomach, though I don't suppose that under present conditions here in Portland this will work as an effectual means for the increase of this disease. It isn't necessary to introduce the germ but if a proper soil is provided—any weakening of the tissues, then the germs find a proper environment in which to work.

As to the meal test I should proceed a little different from the plan advocated by Dr. Meserve. Give the patient a meat supper and in the morning a meal of cereals and milk. Half an hour after breakfast insert the stomach tube. If you then find shreds of meat you can be sure that there is some stenosis at the pylorus. The other tests cited by Dr. Meserve are of the greatest assistance and the absence of hydrochlo-

ric acid and the presence of lactic acid should always be determined by the proper chemical tests. It seems to me that we do not use the stomach tube enough in diseases of the stomach. Some few object to its use, but most patients do not, and with a little patience the tube can generally be introduced about twenty-two inches without difficulty.

The presence of tumor alone is not enough to establish the diagnosis of cancer. I remember one case especially in which a good diagnostician—a physician whom you all know—had decided that a certain tumor was a cancer of the stomach but later an exploratory incision showed that it was due to general enlargement and thickening of the entire wall of the stomach.

Another helpful symptom in making a diagnosis, especially in cases where stenosis is also present, is splashing. This can be heard after a meal when the patient is rocking in a chair. Of course this symptom is also present in other conditions such as dilatation, and stenosis from other causes, yet if the test meal has proved the absence of hydrochloric acid and the presence of lactic acid you are sure of your diagnosis by exclusion.

It seems to me that we are too prone to call every deep seated tumor a cancer. I recently had a girl with stenosis of œsophagus in which there was great difficulty in swallowing for it took her an hour or more to swallow a cup of tea. I thought she had cancer of the œsophagus and several specialists saw the case and all arrived at the same conclusion. No instrument could be passed through the stricture but after electrolysis a bougie passed readily and now she is as well as ever.

I recently saw a case in a New York hospital in which a child had swallowed quick lime and the gullet had grown together and was entirely closed. The surgeon first did gastrotomy and then worked on the structure from both ends and finally made a good passage.

The "swallowing sound" is another important aid. In a normal œsophagus the bolus of food passes slowly but steadily along and reaches the stomach in about seven seconds, but in cancer it takes twenty or more seconds, so we ought to make the test by aid of a stethoscope.

Dr. S. J. Bassford, of Biddeford, said :

*Mr. President and Fellow Members:*—This question of causation is an important subject and it is receiving a great deal of attention from physicians all over the world. Many careful investigators seem to

have concluded that there are special cancer areas such as Buffalo, and San Francisco, and Dr. Roswell Park has facetiously called the vicinity of his own city, Buffalo, the "Tropic of Cancer." There seems to be some intimate connection between cancer areas and large bodies of water for they are always found associated. From this coincidence some have agreed that moisture is an important factor in the causation.

Dr. S. P. Warren, of Portland, said :

*Mr. President and Fellows Members :—* I did not expect to speak tonight but there is another point worthy of careful consideration. The most important part of the body of women afflicted by cancer are the reproductive organs, the womb and breast. Cancer of the cervix is common in women who have borne children. Cancer of the breast develops after lactation. Therefore, I feel that much more attention should be devoted to carrying out aseptic principles during lactation, and I believe that in every case of labor the obstetrician should examine the woman three months after labor and if lacerations are present sew them up, if erosions are present treat them, if the uterus is out of place correct the displacement.

There is no organ in the body so neglected and often abused as the nipple. It is exposed unprotected to the friction of clothing, often too tight, it is often contaminated with sour milk. The nipple should be kept clean and if these precautions were carried out there would be little risk of abscess of the breast, and less of subsequent cancer.

Dr. C. E. Williams, of Auburn, in closing the discussion, said :

I have just a word to say. Of course, I did not try in my short paper to cover the whole ground of treatment, but to refer more especially to the general practitioner's treatment. It seems to me that electricity holds out hope of help and cure in this disease, and the same is true of the X-rays. Removal of the ovaries seem also to have an influence in limiting, in some cases, at least, the growth of these tumors. We hope in the future to have a serum which when injected will combat cancer in any part of the body.

Dr. W. B. Small, of Lewiston, said :

In closing I wish to emphasize some of the things said here tonight. In my paper I attempted to give the conclusions of many observers, but my own opinion is that cancer is largely a contagious or parasite disease. Many observers have brought forward facts

to help prove this theory of etiology, and if the blastomycetes can be isolated, cultivated and after injection will cause new growths, it proves this theory of causation.

Cancer is a disease largely prevalent in the north temperate zone, it is rare in Arctic regions and in the tropics. If it occurs in particular localities it has in some way gained a foothold there and then over-alimentation—too much meat—and other abuses starts the disease and we get much of it. I have in mind a series of cases. A woman had cancer. Her sister, a perfectly healthy woman, took care of her. Some time after she went home her husband was taken sick and died and the autopsy revealed a cancerous lesion of the abdomen. Finally the wife died, and all these deaths occurred within a period of four years. So it seems to me that the occurrence of cancer in certain areas, cities, streets and dwellings is explained when we conclude that cancer is contagious.

According to population New York has no more cases of cancer than Lewiston, and if statistics do not show increase of cancer in all cities having an extended water front, I should not consider that that had anything especially to do with the causation.

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Abstracts of Several Articles by W. S. Gottheil, M. D., of New York.

(ACTINOTHERAPY, *Gottheil*.)

(*Author's Abstract.*)

In a preliminary communication upon the use of concentrated light in the treatment of dermal affections, W. S. Gottheil briefly reviews the work done by Finsen, Kime and others in this field, and describes the arc light that he employs for the purpose. This is at present the only available source for the actinic rays of sufficient volume and intensity for therapeutic employment. Sunlight is of course the best, and is costless; but it is too uncertain for satisfactory use. No combination of incandescent bulbs, run on the ordinary continuous or alternating commercial current, is sufficiently actinic, and the apparatuses arranged with them practically give us heat and no light baths.

The author employs an apparatus called the actinolyte, made by Kliegl Bros., of New York, which can be adopted to either the continuous or the alternating current, uses from 25 to 55 amperes and gives a concentrated circle of light of from 20,000 to 30,000 candle power. He is not prepared as yet to publish his results; but the progress



of cases of lupoid and syphilitic ulceration has been most encouraging. The cosmetic results of this non-operative and painless method of treatment are especially good; a point of the greatest importance, of course when the face is involved. (*The Medical News*, July 6th, 1901.)

(DUHRING AND DISEASES IN CHILDHOOD; Gottheil.)

(Author's Abstract.)

Dermatitis Herpetiformis, first described by Professor Duhring of Philadelphia, is probably of commoner occurrence than is generally supposed, more especially in children; two cases are described by William S. Gottheil, of New York, in the June number of the *Archives of Pediatrics*. The resemblance at first sight to an ordinary eczema, dermatitis, or impetigo is marked, and doubtless cases of the disease are not infrequently so classified. The points which distinguish the less common affection are:

1. The extreme obstinacy and chronicity of the malady; it being prolonged almost indefinitely by successive exacerbations or relapses.
2. Its original herpetic character and subsequent multiformity of lesion.
3. The intense pruritus.
4. Its recalcitrancy to treatment.

Any apparent eczema, dermatitis or impetigo in children presenting these features should be carefully observed; a certain number of them will undoubtedly be found to be cases of Duhring's diseases.

(THE CURABILITY OF SYPHILIS; Gottheil.)

(Author's Abstract.)

Speaking of the curability of Syphilis in the symposium upon that disease in the October number of the *International Medical Magazine*, William S. Gottheil, of New York, takes exception to the opinion of its practical incurability which is prevalent in certain quarters. Every day experience shows that the great majority of cases are cured in every practical sense, the occasional late relapses and accidents to the contrary, notwithstanding. He concludes:

1. Syphilis is a curable disease, and may even, with restrictions, be called a self-limited one.
2. Whilst cure in a given case cannot be affirmed with scientific accuracy, the chances of its being the fact after a certain time under proper treatment are so great that it may be properly claimed to have been affected.
8. Practically, a patient who has been

properly treated throughout the active stages of the disease, and who has had no manifestation of its persistence for several years thereafter, may be regarded as cured, and may be told so.

(THE UNRECOGNIZED CHANCER; Gottheil.)

(Author's Abstract.)

The Unrecognized Chancre: In the *International Medical Magazine* for October William S. Gottheil calls attention to the frequent insignificance and fugacity of the syphilitic initial lesion, which leads to its non-recognition in quite a large proportion of cases. Ignorance of its occurrence, and not voluntary falsification, is the cause of the frequent absence of a syphilitic history in undoubtedly specific cases. The author calls attention to the following points of diagnosis:

1. The presence of a tumor as the original lesion. In its essence, and invariably at the beginning, the chancre is a small, round cell accumulation in the skin or subcutaneous tissue. Ulceration may occur, and usually does, or even phagadaenism; but these are accidental, and epiphenomena, and almost invariably the specific induration is appreciable at the base of the lesion.
2. The tumor is indolent, painful, and recalcitrant to treatment.
3. A peculiar and characteristic "stony" induration of the nearest lymphatic glands accompanies it, different from the general adenopathy that occurs later as a consequence of the systemic infection. Other lesions, as gummata, do not show it.

4. Chancre runs its full course in a few weeks, whilst tuberculosis takes months, and carcinoma even years, for its development.
5. The well known signs of general luetic infection, osteocopic pain, cephalalgia, synovitis, general lymphadenitis, exanthem, etc., must be carefully and persistently searched for in every suspicious case. They may be so slight as to entirely escape careless examination.

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A FALLACY.—"There is a great deal to be said on both sides of every question," said the broad-minded man. "My dear sir," answered Mr. Meekton, "it is very plain that you have never engaged in an argument with Henrietta."—*The Washington Star*.

ONE ON THE DOCTOR.—"No, I am not a Christian Scientist," said Kandor.

"But you believe in throwing physic to the dogs," remarked Dr. Krabbed.

"Not if it happened to be your physic and my dogs."



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PORTLAND, MAINE, MARCH, 1902.

## Editorial.

### The Principles of Preventive Medicine Applied to the Insured.

The most noble part of the physician's duty is to prevent disease. This duty the profession is all the time striving to fulfil, and as much of energy and ability is daily devoted to this consummation as to the cure of disease. In spite of all our efforts, however, progress has been slow, largely because the selfish interests of the public and the indifference and apathy of those who would be benefited, stands as a Chinese wall, minimizing our best endeavors.

The resources of preventive medicine fully understood and judiciously applied are today sufficient to wipe out three-fourths of the diseases that afflict humanity and to confer increased health, happiness and prosperity on all our people. The reason why the people do not reap these benefits is largely because of their own ignorance and apathy, and of the mental myopia and strabismus of the politicians who masquerade as legislators.

In order to apply the principles of preventive medicine to the cure of the evils from which the body politic suffers, education, enthusiasm, money and ability must be brought to the work. In all these needful contributions the sacrifices of the medical profession are conspicuously more generous

than those of reformers, legislators, and of the beneficiaries themselves.

It is perhaps too much to expect that much headway should be made in this direction so long as selfishness and ignorance bar the way, but there is at least one department of active business in which the application of the principles of preventive medicine would result in a direct pecuniary benefit to all concerned, and that is in the Life Insurance business.

It would seem to be good policy for insurance companies to be sure, not only that "risks" were in good health when accepted, but also to see to it that they are kept in the same condition. Every year life insurance companies pay many death claims by reason of the prevalence of tuberculosis, Bright's disease, diabetes and other chronic diseases. Would it not pay these companies to have the medical supervision extended until it should cover the reporting of such diseases among their clients, to the home office. Would the companies not save money by caring for the lives of those whom they have insured? If the companies should insist on a medical examination of every one of their patrons every year or two, would not the early detection of disease save and prolong so many insured lives that the premiums paid would much more than offset the additional expense?

More than this, such a practice on the part of insurance companies would act as an educational measure, and would be at least a help in furthering the general adoption of the principles of preventive medicine.

#### Are Free Libraries Capable of Abuses?

Many a parent has made it an excuse that because he had a hard time of it when a boy, and was consequently undeveloped, that his own children should have everything they could wish. It is doubtful, however, if such a parent, after a course of mollicodding and pampering has been any better satisfied when he has realized that he has succeeded in rearing a weak, selfish prig when he might have given to the world a disciplined, self-reliant young man.

One of the greatest men who ever was moved to write, once declared that the most remarkable evidence of God's wisdom was that he had given mankind opportunities rather than things. It is a very excellent training for young men that they should be compelled to earn things for themselves rather than acquire them by free gift.

It is said that the impulse which has impelled Mr. Carnegie to found so many free public libraries, is the fact that when he was a boy, willing and anxious to learn, that he was too poor to buy books and there was no other way in which he could obtain the books necessary to educate himself. To many when put just this way this state of affairs may seem an unnecessary hardship, and yet when considered in all its bearings it might well be questioned if it were not really a blessing in disguise. It is an undoubted fact that men are developed by overcoming obstacles and by fighting difficulties, and probably these very hardships may have created a powerful influence in making Mr. Carnegie the man he is. It is not the worst thing that could happen to a young man to be obliged to work and struggle for an education, and to be endowed with that appreciation and perseverance which will incline him to overcome all obstacles.

It would undoubtedly be a very excellent thing if Mr. Carnegie should scatter public libraries all over the world, but it would be a much greater thing if he could endow the readers with a taste to read something besides works of fiction, most generally, too, fiction of the most mediocre quality.

As everybody knows Lord Bacon gave us the axiom that some books are to be tasted,

others to be swallowed, and some few to be chewed and digested. From this declaration we may draw the corollary that out of all the books written it is only a few which it is worth while to study sufficiently to digest and assimilate their ideas.

Every library in the land is rich in those few books which are worth one's study, but it is the report of librarians that these same books are left to moulder on the shelves. The conclusion from this one statement is that men who have an appreciation for such books have earned the money and bought them and have them in their homes, and that most persons who are patrons of our public libraries are more interested in the books that are only fit to be tasted.

Not so very long ago at a meeting of the American Library Association, Mr. John C. Dana, Librarian of the Denver Public Library, relieved his mind in this wise: "In the public library you have stored a few thousand volumes, including, of course, the best books of all time—which no one reads—and a generous percentage of fiction of the cheaper sort. To this place come in good proportion the idle and the lazy, and also the people who can not endure the burden of a thought, and who fancy they are improving their minds, while, in fact, they are simply letting the cool water of knowledge trickle through the sieve of an idle curiosity. The more persistent visitors are largely men who have either failed in a career, or never had a career, or do not wish a career." It is further reported that this address was greeted with enthusiastic applause, and that the consensus of the librarians present was to the effect that there was such a thing as an abuse of free libraries; that the free library checks the tendency of the serious reader in collecting a library adapted to the wants and tastes of himself and his family; that it leads parents to disregard the general reading of their children.

The seed of wisdom gathered from all the facts presented by these expert authorities was to the effect that neither the public library nor the public schools could do its duty toward its readers and pupils without the hearty and intelligent co-operation of the parents, and that in the present trend of public taste in literature that the use of the free public library should be watchfully directed from the home.

There is another phase of this question which has not been touched upon, and that is that every library should have at the

head a trained, educated librarian. Most managers of libraries are chosen under the influence of politics, and are given the position as reward for political pull rather than by reason of fitness. If Mr. Carnegie should insist that every one of his libraries should be directed by an educated librarian who should be paid a salary commensurate with his fitness, he would greatly increase the usefulness of his gifts. The librarian should be an expert, able and anxious to direct the reading public away from a diet of trash towards the best and the most helpful in literature.

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#### The Report of the Committee of Fifteen.

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The committee which has undertaken a thorough investigation of the social evil in New York City has issued a monograph which is a real addition to the literature of this important subject.

After a careful gleaning of facts and a long and painstaking investigation this committee has declared that all the plans, so far tried, aiming to abolish this evil, have proved abortive, and that the so-called government or municipal regulation plan has proved a conspicuous failure. The relementation plan has been tried for over one hundred years in Paris and though backed by unlimited power, vast appropriations and the most perfect system of police administration in the world, this plan has proved inadequate to cope with this evil.

After a careful consideration of the difficulties to be overcome and of the results attained under the regulation plans, the committee declares that this plan is to be condemned because it makes the state or city a partner in the traffic, and so gives vice a moral support which it ought not to have, and moreover, it tends to make the practice of this vice safe and easy. The alleged sanitary advantages—the lessening of venereal diseases—which has always been said to be brought about by regulation, the committee declares to have little foundation in fact and to be of no importance when compared with the moral disadvantages. The conclusion of these investigators on this point is summed up in the statement that moral grounds alone would have led them to declare government regulation impossible.

If abolition is impossible, and state control tends only toward increased immorality what plan of relief does the committee offer us?

Their conclusions are summed up in the terse phase—moral regulation. They recommend the reformation of the "Raines-law hotels," and declare that the almost inconceivably nefarious part the Raines-law hotel has played in the great spread of vice in New York will astonish even those who believed themselves familiar with the subject. Recent developments in connection with the murder of Walter Brooks seem to prove that many of these so-called hotels are but open bar rooms with a house of assignation attached.

This committee, according to the Literary Digest, also make other recommendations intended to prevent leading into temptations the young and those born to unfortunate surroundings, and to deliver from evil those who have any desire to be delivered. These recommendations include: the better housing of the poor, purer forms of amusement, the raising of the condition of labor, and especially female labor, better moral education, minors more and more withdrawn from the clutches of vice by means of reformatories, the spread of contagion checked by more adequate hospital accommodations, and the evil itself unceasingly condemned by public opinion as a sin against morality, and punished as a crime with stringent penalties when it takes the form of a public nuisance.

All this is very excellent advice, although who can doubt but that it will prove disappointing to those enthusiasts, who favor quick and easy methods of reform and who think the law offers an adequate panacea for all the physical and moral ills which afflict mankind.

The results of this investigation also gives added force to the precept that no man can live to himself alone. In matters relating to public health and morality all classes of citizens are interdependent. Vice and intemperance in the slums are an indirect menace to the health and happiness of all classes of the community. If we could banish from our midst the direct and indirect effects of alcoholism, and if we could control the ravages of the venereal diseases and their far reaching complications we should undoubtedly succeed in abolishing evils which cause a large part of the sorrow and suffering in the world.

Therefore, if not from high motives of philanthropy, then from motives of selfishness and self-protection, it is the duty of all to attempt to relieve the temptations of their fellows and to extend to them the means of higher and better living.

## Reviews.

**COHEN. A SYSTEM OF PHYSIOLOGIC THERAPEUTICS.** A Practical Exposition of the Methods, other than Drug-Giving, Useful in the Prevention of Disease and in the Treatment of the Sick. Edited by Solomon Solis Cohen, A. M., M. D., Professor of Medicine and Therapeutics in the Philadelphia Polyclinic; Lecturer on Clinical Medicine at Jefferson Medical College; Physician to the Philadelphia Hospital and to the Rush Hospital for Consumption, etc. In eleven octavo volumes. American, English, German and French Authors. VOLUME VI, DIETOTHERAPY AND FOOD IN HEALTH. By Nathan S. Davis, Jr., A. M., M. D., Professor of the Principles and Practice of Medicine in Northwestern University Medical School; Physician to Mercy Hospital and Wesley Hospital, Chicago; Member American Medical Association, etc. Published by P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia, 1901. Price for the set complete, \$27.50 net.

This is a well-written book on an important subject. It is brief and thorough, clear and concise, and is a real addition to the literature on this subject. Much study and research have been expended in its preparation, and in a single volume it presents in a practical way the principles and the clinical applications of diet in its relations to both health and disease.

The first part of the book is devoted to a consideration of the general principles of diet, and diet in health, and the author takes occasion to pay a tribute to the value of the original work now being carried on by the United States Department of Agriculture and by Professors Atwater, Chittenden, and others. The many tables which accompany this part of the text are interesting and instructive and add greatly to the practical value of the book. After a short chapter on food in health and the uses of water in dietetic, the author considers in order the elements of food, the quantity and kinds of food needed in health, animal and vegetable foods, beverages, diet in health, infant feeding, and food as a cause of disease.

Part two applies the principles laid down in the first part, and the result is an exhaustive consideration of the subject of the role which diet plays in the treatment of disease. Those who buy this book can hardly fail to be pleased with it, and it is a valuable addition to this important series.

**INTERNATIONAL CLINICS.** A quarterly of Clinical Lectures and especially prepared articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pædiatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and other topics of interest to students and practitioners. By Leading Members of the Medical Profession throughout

the world. Edited by Henry W. Cattell, A. M., M. D., Philadelphia, U. S. A., with the collaboration of John B. Murphy, M. D., of Chicago; Alexander D. Blackader, M. D., of Montreal; H. C. Wood, M. D., of Philadelphia; T. M. Rotch, M. D., of Boston; E. Landolt, M. D., of Paris; Thomas G. Morton, M. D., and Charles H. Reed, M. D., of Philadelphia. With regular correspondents in Montreal, London, Paris, Leipsic, and Vienna. Volume IV, Eleventh Series, 1902. Published 1902, by J. B. Lippincott Company, Philadelphia. Price, \$2.00.

The same high standard which has distinguished the previous quarterlies of the International Clinics is characteristic of this volume. In an able and painstaking way the authors have reviewed, digested and epitomized the recent literature of the subjects treated. The eleventh series has furnished 110 articles, of 1221 pages, illuminated by 259 illustrations in colors and in black and white.

A volume prepared by such distinguished writers and teachers can but command the respect and approbation of the Profession. The present number includes articles by Drs. Norman Bridge, C. H. Burnett, J. B. Deaver, W. S. Gottheil, J. P. C. Griffith, A. Jacoby, J. F. Lydston, J. S. Musser, F. A. Packard, Nicholas Senn, Alfred Stengel, J. M. Taylor, James J. Walsh, Sir Dyce Duckworth, W. C. Knauss, Prof. G. Marinesco, Prof. A. Mathien, G. L. Walton and H. C. Wood, Jr., and the subjects presented are such as these experienced specialists can treat with wisdom and authority.

Beginning with several instructive clinical lectures grouped under the heads of Therapeutics, General Medicine, and Neurology, this volume includes articles by Drs. Senn and Deaver on surgical diseases, the operative relief of some forms of prostatic hypertrophy by Dr. C. H. Chetwood, movable kidney by Dr. G. F. Lydston, exploratory incisions in doubtful tumors by Dr. P. Quenn, deformities in children, from the standpoint of the general practitioner by Dr. J. Madison Taylor, the modern treatment of some common dermal affections by Dr. W. S. Gottheil and several other interesting and instructive articles. This is a good number of a good quarterly—a credit alike to authors and publishers.

We have just one little criticism to offer and that is that it would have been just as well if no advertisement had been included in the book.

**SAUNDER'S AMERICAN YEAR-BOOK,** the American Year-Book of Medicine and Surgery for 1902. A yearly Digest of Scientific Progress and Authoritative Opinion in all branches of Medicine and Surgery, drawn from journals,

monographs and text-books of the leading American and foreign authors and investigators. Arranged, with critical editorial comments, by eminent American specialists, under the editorial charge of George M. Gould, A. M., M. D. In two volumes—Volume I, including General Medicine, Octavo, 700 pages, illustrated; Volume II, General Surgery, Octavo, 684 pages, illustrated. Philadelphia and London: W. B. Saunders & Co. 1902. Per volume: Cloth, \$3.00 net; Half Morocco, \$3.75 net.

The plan of issuing the Year-Book in two volumes, inaugurated two years ago, met with such general favor with the profession that the publishers have decided to follow the same plan with all succeeding issues. Each volume is complete in itself, and the work is sold either separately or in sets.

The contents of these volumes, critically selected from leading journals, monographs and text-books, is much more than a compilation of data. The extracts are carefully edited and commented upon by eminent specialists, the reader thus obtaining, not only a yearly digest of scientific progress and authoritative opinion in all branches of medicine and surgery, but also the invaluable annotations and criticisms of the editors, all leaders in their several specialties. As usual, this issue of the Year-Book is not lacking in its illustrative feature; for, besides a large number of text-cuts, the Surgery volume contains five, and the Medicine volume four, full-page inserts. In every way the Year-Book of 1902 fully upholds, if it does not strengthen, the reputation won by its predecessors, and every progressive physician will find it a valuable aid in enabling him to easily acquire the real advances which have been made in every department of medicine during the past year.

The volumes are so exceptionally well printed and bound that they will prove both useful and ornamental, and though great expense must have been entailed in preparing the work, yet the price is reasonable and satisfactory.

**SYPHILIS, A SYMPOSIUM WITH SPECIAL CONTRIBUTIONS.** By L. D. Bulkley, M. D., Follen Cabot, Jr. M. D., L. A. Duhring, M. D., Prof. Fournier, M. D., Eugene Fuller, M. D., E. B. Gleason, M. D., W. S. Gottheil, M. D., R. H. Greene, M. D., N. B. Gwyn, M. D., Orville Horwitz, M. D., E. L. Keyes, M. D., G. F. Lydston, M. D., D. J. McCarthy, M. D., T. G. Morton, M. D., Boardman Reid, M. D., A. Robin, M. D., and J. D. Thomas, M. D. Published, 1902. By E. B. Treat & Co., 241-243 W. 23 St., New York. Price, \$1.00.

Though there is little new in this small book, yet it is of value by reason of giving

the opinions of many well known specialists upon certain questions of eminent importance. While there is not perfect agreement in the answers to the questions propounded, yet on many points the writers are in accord.

The book is made up of a series of papers prepared for general practitioners by syphilographers of large experience, and includes also answers by eminent specialists to a series of questions.

All the articles are short, clear and concise, but the manual well covers the whole field of this important subject. One of the best features of the book is the hopeful tone which pervades it in regard to the curability of syphilis, and the general assurance that except in rare cases, its victims may become parents of healthy children.

The book first considers the etiology, then the features in the diagnosis, and last the treatment. Besides this there are chapters devoted to syphilis of special organs, and the answers of several specialists to the series of questions propounded.

The book is well printed and bound, and the price is reasonable.

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## Selections.

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### Implantation of a Glass Ball into the Orbital Cavity.

By L. WEBSTER FOX, A. M., M. D., Philadelphia, Pa.,  
Professor of Ophthalmology in the Medico-Chirurgical College, Philadelphia.

I again wish to call the attention of the medical profession to implantation of a glass ball in the orbit where the eyeball has been previously removed and where the tissues of the orbit, as well as the lids, have contracted, and where it is impossible to wear an artificial eye. Such cases come to the notice of all ophthalmic surgeons sooner or later—either a small shell is worn for a few hours daily or the patient must suffer the annoyance of going without an artificial eye.

It has been four and a half years since I first performed this operation for the relief of a patient who had her eyeball removed when ten years of age. The history of one case is the history of many. I shall repeat the history of my first case and give the description of the operation.

Twelve years prior to this operation I removed the patient's eyeball at the Germantown Hospital, but the tissues had contracted to such an extent that no eye could be worn with comfort. My method is as follows: An incision is made through the

conjunctiva and tissues of the orbit in the horizontal direction, corresponding to scant the diameter of the glass ball to be inserted—for instance, if the glass ball is one centimetre in diameter, the cut would be two millimetres less. The upper lip of the conjunctiva is raised and with sharp-pointed curved scissors the conjunctiva and such connective tissue which lies close to it is dissected off in all directions around the incision, making a pouch into which the glass ball will fit. On account of the vascularity of the parts, considerable bleeding follows this dissection, but it is easily controlled by pressure; after the bleeding stops, the glass ball is inserted into the cul-de-sac with the injector. The edges of the conjunctiva are brought together by five or six stitches and the after dressing is the same as I follow in the evisceration cases.

Immediately after the operation, the artificial stump does not show very markedly; but after all swelling disappears we have a beautiful stump for the adjustment of an artificial eye. It would be almost impossible to note the difference between implantation and evisceration, for the movement is almost the same.

I have repeatedly performed this operation, and in every case the appearance of the patient has been improved, also obtaining great relief from the retained secretions in the orbital sac, even the contraction of the upper eyelid has been changed. I have not improved my original operation, excepting where the upper eyelids are too short, I perform a Burrow's operation, which is that of splitting the cartilage from outer to inner canthus, thus elongating the upper eyelid. This operation does not interfere with the adjustment of an artificial eye afterwards.

I have not been uniformly successful in performing this operation; on account of the cicatricial condition of tissues the stitches would give way and the glass ball would be forced out of the orbital sac. In one individual I performed this operation three times. The first and second were failures; the third time the glass ball was retained, and I was enabled to adjust an artificial eye or shell later on. On several occasions I have used silver balls, but, owing to the argyria staining, disfiguring the tissues and coloring it a dark blue, it is rather an objectionable feature and annoying to some: yet one patient, where I performed a Mules, rather liked this condition, claiming that when she took out the shell the orbit more nearly approached the appearance of the natural eye.

This operation must not be confounded

with that of Frost-Lang, which is the insertion of a glass ball immediately after enucleation. It is, however, the same principle. I have performed the Frost-Lang's method several times with excellent results. I do not stitch the muscles, as I believe that it is unnecessary; it would have a tendency to keep the glass ball too far down in the orbit.—*N. E. Medical Monthly.*

#### What Should be the Aim of Education?

President William DeWitt Hyde, of Bowdoin College, when recently asked for an answer to the question, "Does a college education pay?" replied: "To be at home in all lands and all ages; to count nature a familiar acquaintance, and art an intimate friend; to gain a standard for the appreciation of other men's work and the criticism of one's own; to carry the keys of the world's library in one's pocket, and feel its resources behind one in whatever task he undertakes; to make hosts of friends among the men of one's own age who are to be leaders in all walks of life; to lose oneself in generous enthusiasms and co-operate with others for common ends; to learn manners from students who are gentlemen, and form character under professors who are Christians—these are the returns of a college for the best four years of one's life." It is in the spirit of these words that President Hyde writes on the problems of our educational system in the January issue of *The Forum*, setting himself to discover the true principles and standards of education. He declares:

"The besetting sin of the higher education is its inevitable tendency to resort to devices which gets something out of everybody, instead of putting the best things into the few who are able to receive them. It is infinitely easier to get grammatical and philological results out of everybody, than to impart literary taste and appreciation to anybody. Hence the monstrous perversion of classical study which has made the literature of these marvelous peoples almost as dead as the languages in which they are written. . . . In dealing with large masses of men it is so tempting to substitute mechanical dexterity in manipulation for the grasp of the significance of things, in science; grammar and philology for insight and appreciation, in literature; transcription for illumination, in history; the criticism of other men's opinions for the examination of one's own, in philosophy, that the best teaching is sure to be rare in any institution."



The twentieth century, continues the writer, finds us tired of the German type of scholarship, with its zeal to heap up new acquisitions of knowledge regardless of relative worth, sense of proportion, attractiveness of form, or either esthetic or practical use. "It is just beginning to dawn upon us," he observes, "that a grain of inspiration is worth many ounces of information; that an ounce of comprehension is worth many pounds of aggregation; and that a single pound of art is worth many tons of science." Furthermore, the degree and the thesis are no longer accepted as sure indications that a man is prepared to teach American youth. On this point President Hyde says:

"Knowledge and technical skill, the disposition to keep step with progress, and the courage to make little excursions on his own account into the unknown, the professor must not indeed, be without; and if the doctor's degree, or an appropriate hood, serves to mark this capacity, all the better. On these points evidence is easily secured. But then begins the real sifting of the candidates. Was he a leader among his fellows in college; or has he since acquired sufficient appreciative sympathy with undergraduates to know how to lead them now? Is he a man of force sufficient to have given him influence and power as an educator, a lawyer, a banker, or a railroad manager, if he had chosen those walks of life? Is he genial, so that, if he were not a professor, young fellows would be likely to spend occasional evenings with him at the club or in his home? Has he such a character that whoever meets him is stronger and purer for the contact? Has he keenness and humor so that he can see through men's motives as if they were glass, and not let them pull the wool over his eyes? Has he tact to get what he wants done without arraying against himself that instinct of freedom which is the strongest and the noblest impulse of youth? Does he live in his subject, so that the meaning and worth of it overflow into whatever he says and does? Is the begetting of a kindred enthusiasm for his subject in intelligent pupils the keenest delight of his life? Has he the sense of proportion which enables him to drop all this technical interest when he goes out into the world, and to be a man among men? Has he perfect health, and the cheerful temper which goes with physical vigor? Can he live on his salary without being harrassed and degraded by debt? Does he stand well with the authorities in his own department, and will he ever do anything to build up the reputation and influence of the institution he serves?

"These are a few of the many, almost mutually exclusive, qualities the professor must have. Do you wonder that those of us who have to select men for such positions find that out of any fifty well-recommended and apparently well qualified candidates for a chair there are never more than two or three that merit serious consideration?"

According to President Hyde, the aim of education is to fit one for three things: (1) to earn one's living by the exercise of trained powers; (2) to support the institutions of society by intelligent appreciation of their worth; and (3) to enjoy the products of art and civilization through the cultivation of imagination and taste. In so far as education promotes these ends, it is successful; in so far as it thwarts them, it is a failure. President Hyde sketches his educational ideal in the following words:

"A system which reveals to the kindergarten child the beauty and joy of the world's treasure-house before it puts the cold iron keys in his hand; which, when it must train him to acquire and handle these keys, still lets him use them to unlock the myths, legends and stories of man's great visions and deeds, the marvels and mysteries of rock and soil, plant and animal, sea and star; which is ever on the watch for the bent of each individual mind, and eager to give it free play; which, nevertheless, rigidly requires the task freely chosen to be done as the individual's best, and to be measured by absolute standards; which secures strong men and highly trained women as teachers, and brings them close to all students, and intimately near to the chosen few who are able to appreciate them; which goes behind the forms of words to the meaning of great works of art, and grasps details in their larger signification; and which wins to the lifelong service of pure truth, beauty and goodness the choice youth in each undergraduate class—that system is a magnificent triumph, a triumph the first fruits of which we even now can enjoy, for the sake of which we are all called to labor, and the assurance of which is the best heritage we can hope to hand down to our children."—*The Literary Digest*.

AN ARGUMENT AGAINST KOCH.—One of the evil results following the publication of Koch's views on non-identity of human and bovine tuberculosis is the increased sale of meat from tuberculous cattle. This was to be expected. It is claimed that Milwaukee packers at once began the sale of meat from cattle which were tuberculous.—*The Colorado Medical Journal*.



### Hot Water Injections.

Wonderful and valuable discoveries have been made by accident, or without any special effort being made along the lines of research. Of late the most prominent discoveries by accident have been the X-ray and the spectrograph, "which enables a person using a telephone to see his interlocutor and the latter's surroundings." In practice we learn much from our own and from the mistakes of others; especially in surgical practice does this hold true, for it is impossible for the surgeon to cover his mistakes.

It frequently happens that an obscure country doctor, whose services, by the way, are of just as much importance as those of the city professor, makes a valuable discovery, or possibly a mistake by which the profession may profit. This time the honor falls to the country doctor, and to the Lone Star State. In preparing a case of anal fistula for operation, the doctor proceeded to wash out the tract of the fistula with what he supposed to be a warm solution. Whether the fistula was complete or incomplete, or what style of irrigating apparatus was used by the doctor, we are not prepared to state. At all events, the doctor soon discovered that his irrigating solution was *so hot* that he had not only cleansed the diseased parts upon which he was to operate, but that he had unintentionally cooked or scalded the entire tract of the fistula. The case was left without operation, but with a suitable dressing, and in due time the doctor made a further discovery, that the cooking process had resulted in a radical cure of the fistula. This doctor had common sense enough to profit by his supposed mistake, and since then has had the courage to go forward, using boiling hot water in the treatment of such cases, and as a result, he reports several cases of anal fistulæ as cured.

Hypodermic injection of hot water is now being tested at the New York Polyclinic, in the treatment of nevus, angioma, and cases belonging to that class. An injection of water as hot as can be obtained coagulates the blood in the vessels of the tumor, but neither causes pain nor necrosis of tissue. The absence of pain is accounted for by the fact that air is not allowed to reach the scalded tissues, and this with the sterile condition of the water may prevent necrosis.

The technique of hot water injections is very simple. No special apparatus is required. A syringe of any size may be used from a hypodermic up, but one of about the capacity of an antitoxin syringe is preferable.

The syringe should first be filled with water, and with needle adjusted ready for use is placed in a pan of water and brought to the boiling point. The field of operation is sterilized, and for the purpose of protecting the sound skin of the patient from the hot syringe, a thick pad of gauze in which an opening has been cut in the centre to allow the tumor to protrude is placed over the field. If the tumor is located on the face, and especially if the patient be a child, as in cases of nevus, chloroform or ether should be used. If on the body or limbs cocaine is the proper anesthetic, to be used only at the point in the sound skin a short distance away from the tumor, where the needle of the hot syringe is to be introduced; as the injection of hot water into the tumor proper is not painful.

The syringe having been previously filled is now drawn from the pan of boiling water by the aid of some hooked instrument, and quickly wrapped in a pad of gauze to protect the hands of the operator. Air is expelled, and the needle inserted in the sound skin at or a very short distance from the base of the tumor, the point of the needle being carried forward and upward into the mass of the tumor. At this stage great care should be used to avoid passing the point of the needle out through the surface of the tumor, for, if the skin is broken, the hot water will escape, and not only the benefit of the remedy lost, but serious hemorrhage may follow. After the syringe has been removed from the pan of boiling water, the injection should not be delayed for a second. The operator should work rapidly but with care. The vessels and tissues affected by the heat at once turn white. The operator alone must decide upon the quantity to inject at each sitting and should stop before the sac of the tumor becomes too tense. Avoid an excessive quantity. He must be governed by the size of the tumor treated. On withdrawing the needle the point of puncture should be sealed with collodion at once. A nevus, the size of a large chestnut, should be cured by three injections, at intervals of one week, if the water used is of sufficiently high temperature.

It has been suggested that an alcohol lamp held under the barrel of the syringe by an assistant or by means of clamps to keep the water at the boiling point while being injected would add to the value of the remedy. Its practicability will soon be tested, and perhaps an asbestos mitten may be used by the operator.—*The International Journal of Surgery.*

### The Amateur Critic.

By JOSEPHINE TOZIER.

The amateur critic exists in every walk of life. He is behind counters and in front of the kitchen range. His criticisms are often incisive and full of real stuff. He echoes the sentiments of his circle unless he lifts himself above his kind by meddling with art. When he makes music and the makers of music his specialty, the value of his criticism is usually most pernicious to his admirers, and a serious detriment to the real musical growth of a people. For the remarks of an ignoramus can sweep aside the opinion of a trustworthy impartial writer.

The amateur musical judge and critic is of many sorts and kinds. First, but lowest down on the list, comes the man that often moves in good society and airs his opinion much and frankly; that declares Beethoven is not "in it" with De Koven; is proud of his boldness and expresses what he holds to be the real sentiment of the multitude (*it is*); and will not hesitate an instant, when started on his favorite theme, to tell everyone which of the great singers or players best "knows his business," or to condemn others not to his liking by such sweeping assertions as "Now you don't want to go and hear *John de Reszké* in *Siegfried*, there's nothing in it. Now when I heard *Alvary*," etc. To the readers of this article it would scarcely seem possible that such opinions can have weight; but, as is the case with every one who assumes knowledge, this self-constituted judge has his following, who quote him seriously to those who know better. He sometimes even airs his ignorance in print, as witness the amateur critic who objected to Schumann's orchestral works on the ground that Schumann was, after all, "only a song writer."

I think, however, although not distantly remote from the admirer of *San Toy* versus Beethoven, the gentleman quoted above belongs to a second and still more dangerous class of amateur critic,—the critic that talks learnedly about what he calls "classical music" and adores the virtuoso performer with his million of well-played notes; who likes to see at a concert how things are done, wants to feel that the performer is playing something that means work, and always thinks more of the artist who is making the music than of the music the artist is making. This amateur critic is found scattered plentifully all over our concert rooms and opera houses, and always

has with him an admiring wife, sweetheart, cousin or aunt—sometimes the whole set. Has the reader ever sat behind such a company and listened to the way in which tenors, basses, sopranos, and the plot get hopelessly tangled up? Or heard, perhaps, the satisfied way in which an encore (no title on the program) was calmly accredited to Brahms when Chopin did the writing? What are the criticisms of the paid writer to such a circle? What if Mr. H. of the newspaper world does knock A. C.'s knowledge on the head next morning in the columns? If the entranced family take the pains to read his lines and discover he disagrees with papa, as was likely in the case of Schumann's detractor, the easiest part of the amateur's burden is to dispose of the paid critic, "He has dyspepsia!"—that finishes H. No more tickets sold in that circle on his recommendation! The pianist may thump the keyboard flat, use the pedal till one's head aches, dyspepsia has the newspaper man, the news flies, and the tough ears of the amateur critic and his household are more than ever convinced that they alone are good judges.

Third on the list comes the enthusiastic lady, who studies music; she really knows what she is talking about,—at least she thinks her wisdom springs from the proper source. Oh, the misery which one of these good souls can bring to a peaceful entertainment! With what vigor she can pounce on the wretched musician who has just escaped from the labor of hours of criticism to individuals; in other words, from his lesson-giving.

To have a stream turned on like a strong needle bath of "Why X is better than Z," or "How the musical world grows pale and vanishes when Q opens his mouth!"—be this woman the loveliest being on earth, to the poor overworked musical man who disagrees with her in every opinion, but keeps quiet in hopes of a truce, this is torture.

Last of all, the amateur critic who does know is sometimes quite as bad as number one who knows nothing, because, untrammelled by any responsibility, no editor to please, no circulation to consider, she (a woman suits this case better)—she can give free run to her prejudices, which are sure to be strong, because, after the way of painters who are notoriously rarely good connoisseurs, there is always some especial quality which the critic who knows is seeking, and all else fades before the possession thereof, be it tone, touch, or technic. The composer utterly disappears from her criti-

cism and usually takes his composition with him, except inasmuch as it affects her fad. This amateur critic will speak with thrills of admiration about the interpretation of a great composer's work, because her, for the time being, favorite performer has brought out with a see-me-do-it air a slur, staccato passage or sustained note not neglected by the veriest well-taught pupil. Women are seldom catholic in their tastes; it is one of the reproaches hurled at us by the lords and masters that we cannot be broad in any way. To dispute this requires more wit than I possess, but certainly, in music I must bow my head and say that the number of females is strikingly small who can appreciate equally tragic, humorous, sensuous, purely intellectual, or comic sounds fashioned into musical phrases. Witness the horror on a woman's face when a man supposed to be a Wagner enthusiast declares he "really likes a good hand organ." Women are said even when they have knowledge very rarely to judge music with a combination of logical intelligence, a keen musical ear for the language used by the composer in expressing his thoughts. The women's emotions are too near the surface; they unconsciously wipe off their list every performer or composer who does not touch them in some way. Their path is bright, but it is narrow. This amateur critic has immense influence in her circle, particularly with the young or inexperienced, and she is unfortunately helping us here in America to develop into a hypocritical lot the very people whose wealth and patronage could do so much. This amateur criticism is a stumbling-block in the way of our real musical development. We cannot be a musical people until we learn to love the music itself without the constant watching for slips in the interpretation. It is a serious doubt in my mind whether the world has ever had such good musical interpreters as we now hear, take them all in all, but it is fashionable to be an amateur musical critic. At dinners, teas and all gatherings, conversation on music plays a prominent part; yet to those of us who have listened to music talk in a musical land, or among the musical elect, the rantings of the admired amateur critic sound like treason to the great Muse. They are most certainly wild and irresponsible, and the so-called enthusiasm does harm, for it is really common or garden gush, and it inclines the artist to fancy he need not strain after higher art "in America," and makes the mediocrity on which approval rests more than ever satisfied with mediocre endeavors, so the

microbe spreads. Enthusiasm for the worker whose success we admire is wholesome and just, but enthusiasm is not a bubbling geyser, it is something deeper, steadier, stronger. If the amateur critic who knows would talk music, not musicians, find words so ready to her tongue, there would be occasional pauses. She would really be forced to think, and perhaps have a trifle more respect for the hard-worked newspaper writer who had the temerity to rebuke her favorite artist, and whose bread and butter depends on the communication between his ears and his brain.

England furnishes a few delicious amateur critics who occasionally rush into print. The following is an extract from a lady's fashion journal. As a criticism, I don't think it has ever been beaten, even by our ardent admirer or eager listener, it has such a fine sporting flavor. "Miss L. has more than common grace and grip—to say a woman has grace is of less weight than grip, it is grip which is rarer. She is a courageous player; she was good to the last. . . . After handling Beethoven it is not every player who has grip left for Bach or Brahms, or proper sparkle when she takes to capriccios and waltzes."—*The Musical World*.

#### \*Some Experiences with Blood Examinations.

By JOHN B. DEEVER, M. D., of Philadelphia. Surgeon in Chief to the German Hospital, Philadelphia, and EDWARD KEMP MOORE, M. D., of Philadelphia. Assistant Pathologist to the German Hospital, Philadelphia.

To begin with, it is expected that this paper will not be favorably received by many of the profession. Nevertheless, as the popularity of a paper is the least of its merits, we feel justified in recording our experience with blood examinations, even if they do not verify the extravagant claims that have been made by some of those who have made this subject more or less of a specialty.

During the last few years there have been made at the German Hospital several thousand blood examinations upon the surgical patients and the views given you are based upon the results of these examinations, contrasted with the actual pathological findings at the operating table.

What is said may seem to have the object of discouraging what is sometimes called the scientific side of medicine, but this should not be the case, for if the practical benefits of the laboratory methods of diagnosis are

\* Read before the Medical Society of Virginia, meeting at Lynchburg, November, 1901.

not found as great as their originators hoped for, it is their duty to find the reasons for this and place their findings on the firm basis of fact that will make them of the greatest practical benefit to the profession. As an example take the subject of albumen in the urine. When Bright first announced his discovery of this method of diagnosis, after the first wave of incredulity had passed, there was a period when every case with albumen in the urine was expected to die of acute nephritis within a year or so. How untrue that view was we well know, but it was not to those who reported only the cases favorable to that theory to whom credit for advancement was due, but it is to those who reported the cases exactly as they found them, the papers of protest, to which we are indebted for the proper subjugation of this symptom and its establishment as the valuable means of diagnosis that it undoubtedly is.

Just so with examinations of the blood; although not in years, in its development this subject is still in its infancy, and we believe that many of the positive claims made for it must be greatly modified before it is placed on a stable basis and is in proper condition to be of the greatest usefulness to the practical physician and surgeon.

There is undoubtedly much to be learned from examination of blood, and the faults found with its results should not be taken as an effort to hew down the tree, but rather as a pruning to make it take on new vigor and develop into greater usefulness.

With many of the diseases, in which an examination of the blood is said to yield a most gratifying result, our experience has been very limited, and also with some of the different examinations; so that this paper cannot be a complete review of this subject, but only of that part which has been called to notice in a general surgical practice.

#### PARASITES IN THE BLOOD.

Undoubtedly examinations of the blood for the hematozoa malariae are of the greatest value, and when found are absolutely diagnostic of the disease. If the only results achieved by the work done upon the blood had been the discovery of this parasite, the labors of the investigators would have been well repaid. There are certain manifestations of malaria that so closely simulate certain septic conditions that without this means of diagnosis their differentiation would be almost impossible. There are for instance irregular types of malaria that simulate gall stone disease so identically, and were it not for the presence of the hematozoa in the

blood, a prompt diagnosis would be impossible. However, it has been our experience that the more irregular and atypical the case of malaria, the harder are the organisms to find, and therefore in a case where malaria is suspected, a single negative blood examination should not carry much weight.

The filaria sanguinis hominis is another of the parasites of the blood, the detection of which might be a valuable means of diagnosis, but since elephantiasis is quite rare in this locality, we have never met with a case which was confused with any more purely surgical affection. Indeed, at the German Hospital there is only one case in which the finding of this parasite is recorded.

With the spirillum of relapsing fever we have had no experience whatever.

In regard to the various pyogenic bacteremias we must say that we have received very little practical benefit from cultures taken from the blood. In the first place the results of such cultures are usually negative, except in such advanced cases that this method was not needed to diagnose the condition. In the second place, a careful bacterial study takes such a long time, that by the time the surgeon receives this report, the patient has often passed on to the care of the Great Physician, and the only object achieved is to file the bacteriological report along with the report of the post-mortem in order to make the records of the case complete.

We have frequently had the blood examined for microorganisms in cases in which malignant endocarditis was suspected, but usually with negative results; and even when successful it is hard to see with what benefit to the patient.

We should like to place ourselves on record as being bitterly opposed to painful, or disturbing examinations of a patient that do not promise him, or her, any benefit, but are made merely because they are interesting. Often too much zeal in scientific examinations has a very disturbing mental effect on a patient and acts very much to his detriment.

#### SERUM EXAMINATIONS.

The action of the blood serum of a patient suffering from a bacterial disease upon a culture of the specific microorganism has received much attention lately. Of these the Widal reaction for the diagnosis of typhoid fever is the only one with which we are at all familiar.

Undoubtedly a positive Widal reaction can be obtained after the seventh or tenth day of the disease in a very large percentage of

cases of typhoid fever, but as a diagnostic aid to a surgeon its results are upon the whole disappointing. Sometimes in the first days of an enteric fever the clinical picture very closely resembles that of acute appendicitis. At this early date the Widal reaction has not been established and in practically all cases the clinical symptoms have made the diagnosis before the Widal reaction has become positive.

There is, too, a certain percentage of cases of typhoid fever in which the Widal is negative all through the disease, until the third or fourth week, or is intermittent. In our experience it is in the cases in which the clinical symptoms are the most perplexing that the Widal reaction most often fails.

Another source of error is that a few patients without definite typhoid give a positive Widal reaction. Our attention has been especially called to two cases of acute miliary tuberculosis and one of tubercular peritonitis, all three of which gave the Widal reaction and occasioned some confusion in the diagnosis. After an attack of typhoid fever the blood will give a positive Widal reaction for an indefinite number of years, a fact that should never be forgotten, as sometimes it is only with the most careful questioning that we can elicit a history of typhoid, if it is possible at all.

From the observations enumerated we conclude that a positive Widal is rarely of much value to the surgeon, however valuable it may be to the medical man. A negative Widal reaction, especially after an illness of two or three weeks, seems more often of service; for, if after two or three weeks the Widal is persistently negative, we can be almost certain that the case is not one of typhoid fever.

Value has been claimed for the serum reaction in colon, paracolon, proteus and pyocyaneus infections and Infectious Tropical Dysentery, but personally we have had no experience with these serum reactions and we are not in a position to judge of their merits.

The subject of the coagulability of the blood in jaundiced patients is another of the serum examinations that has received attention lately. In jaundiced patients the blood is certainly much slower in coagulating than is normal blood, and, after the administration of calcium chloride or gelatine, the length of time necessary for coagulation seems to be diminished, but yet at operation there seems to be very little difference in the amount of hemorrhage, whether these substances have been given or not. However, there is no harm in their administration, if the operator

should fancy them; but in our experience proper gauze packing at operation and full doses of opium afterward have given the best results in troublesome oozing in gall bladder surgery.

Sugar in the blood can be quite easily demonstrated, but this examination is usually more interesting than valuable. For the urine of all surgical patients is examined for sugar, and tests for sugar in the urine are as reliable and easier of application than are the blood tests.

#### EXAMINATION OF HEMOGLOBIN.

Justi's hemoglobin test for the diagnosis of syphilis has proved itself very satisfactory in the cases in which we have used it, and in a doubtful case is well worth a trial.

Oligochromemia in surgery has been considered of great importance. Some surgeons have stated that they would not operate upon a case in which the hemoglobin was reduced below 40 per cent., others take 30 per cent. as the limit of safety. Our experience, however, does not bear out this view. For an acute suppurative condition or after acute or chronic hemorrhages, operation for the relief of the condition may be undertaken, no matter what the percentage of hemoglobin, and we have records of several cases operated with only from 10 to 20 per cent. of hemoglobin that terminated favorably.

In appendicitis there is a marked loss of hemoglobin, usually from 20 to 35 per cent., and this occurs in both the acute and chronic cases. It, however, seems to have very little prognostic importance, for out of 118 cases two had a percentage of less than 40 per cent. of hemoglobin and both of these were operated successfully.

#### ERYTHROCYTE COUNT.

This gives the surgeon an index as to the powers of resistance of a patient as well as a guide to the severity of the infection. In a case which appears to be only a moderate infection if the hemoglobin and erythrocytes fall rapidly and markedly, there are several points to be seriously considered. First, has the patient a very feeble power of resistance due to individual idiosyncrasy, or a complicating disease, such as nephritis and must we therefore make our surgical procedures as limited as possible. Or, secondly, have we misjudged the severity of the infection.

In carcinoma in the advanced stages there is a marked fall in the number of erythrocytes, but this fall is in no way diagnostic and in the less advanced cases with which the surgeon has usually to deal is either absent or insignificant.

There may be in appendicitis a very notable fall in the number of red blood cells both in the chronic and acute forms; and this although interesting, and often apparently out of proportion to the severity of the condition, we have not been able to make of any great diagnostic or prognostic use.

A chlorotic condition of the blood is often valuable in explaining the cause of amenorrhea and leucorrhea in young girls, as well as in other conditions.

#### LEUCOCYTOSIS.

This phase of our subject is both the most valuable and the most disappointing part of the examination of the blood. Dr. J. C. Costa, Jr., hematologist to the German Hospital, took 118 cases of appendicitis and tried to define the rules governing the leucocyte count, with the following result.

"In simple catarrhal and interstitial forms the number of leucocytes, as a rule, did not exceed 10,000 per cubic millimeter. In a certain proportion of cases, however, exceptions to this rule were noted, for counts of 12,000 or 15,000 and even higher were sometimes made. 36.8 per cent. of catarrhal or interstitial cases showed a leucocyte increase of from 10,000 to 17,000 per cubic millimeter, the latter being the maximum, while in 60.1 per cent, the counts were below 10,000, the minimum being 1,600. Most of these high counts were attributed to a local non-purulent inflammation limited to the peritoneal covering of the appendix, since a circumscribed peritonitis of this sort was very commonly found in this form of the disease. It was tentatively suggested that in some cases the increase represented simply a blood finding of the associated anemia or, perhaps it resulted from blood concentration produced by vomiting or by purging.

In cases with abscess, gangrene or peritonitis a well marked leucocytosis was found in the great majority of cases. In instances of thoroughly walled-off pus foci from which little or no absorption occurred, leucocytosis was often absent; it was also absent in profoundly septic patients in whom the crippling effects of the poison had stifled reaction. Absence of leucocytosis under this latter circumstance was, however, comparatively rare, since in only 16.6 per cent. of fatal cases was a well defined leucocytosis absent, the counts in these two cases being 6,000 and 11,000 respectively. In the other ten the leucocytes ranged from a minimum of 14,200 to a maximum of 58,200 and averaged 19,400 per cubic millimeter.

In three cases extension of the pus focus

and general peritonitis was indicated by a progressive increase in the leucocytosis; this increase having been found to vary from 6,600 to 14,000 cells to the cubic millimeter in excess of the number previously counted. While absence of leucocytosis was observed in connection with small pus collections, it was by no means always true that low counts indicated small abscesses.

Leucocyte counts ranging between 10,000 and 15,000 or 17,000 cannot be depended upon to reflect the nature of the local lesion, since this degree of increase may be found both in mild catarrhal and in purulent cases. Counts of 20,000 or more invariably indicate pus, gangrene, general peritonitis, one or all. Absence of leucocytosis means nothing definite.

In operative cases complete evacuation of the abscess is followed within a few days by a decline to normal in the number of leucocytes, provided that the recovery of the patient is uneventful. Persistence of a leucocytosis after the third or fourth day following operation may usually be attributed either to an undrained pus pocket, or pockets, to general peritonitis, or to both.

Attention is called to the fact that as a rule just those conditions which bear the closest clinical resemblance to appendicitis give rise to blood changes identical with those found in the latter disease, so that the blood count as a means of differential diagnosis is greatly limited. Thus, leucocytosis is the rule in such conditions as ovarian abscess, pyosalpinx, ectopic pregnancy, renal abscess, hepatic abscess, gall bladder empyema and malignant disease of the cecum, all of which conditions have been confused with appendicitis. Since renal and hepatic colics are generally associated with inflammatory complications which produce leucocytosis, neither of these conditions can be distinguished with confidence from appendicitis, simply by the blood examination. Acute gastritis may or may not be accompanied by leucocytosis, so that the blood count cannot be relied upon as a clue in distinguishing this disease from appendicitis. The same is true of dysmenorrhea, in which disease inflammatory changes of the uterus may be the factor of a leucocyte increase. Should the diagnosis lie between appendicitis and enteric fever, the former is suggested by the presence of leucocytosis, since in typhoid this sign is practically never observed, except in the event of such a complication as intestinal hemorrhage or perforation. In typical cases a leucocytosis is sufficient to exclude such non-inflammatory conditions as simple enteralgia, lead



colic, ovarian neuralgia, ovarian cyst and a movable kidney.

Irregular and inconclusive as these cases are, there are individual cases met with that are still more disappointing. For instance, a young man was admitted to the German Hospital with all the symptoms of a severe attack of appendicitis, the leucocytes on the day of admission numbered 20,000. Operation was refused by the patient. He was treated medically with improvement in all symptoms, the leucocytes gradually fell from day to day, after six days they numbered 7,500. At this time permission for operation was granted and a large abscess was found in the pelvis, containing at least 500 cc. of pus. At the time of operation the temperature was normal, bowels moving freely, pain absent and stomach retentive. The only indications of the abscess were tenderness and rigidity of the right rectus and a mass discernible upon rectal examination.

In this case the blood examination proved itself entirely unreliable, and it does not take a very large number of such cases to severely shake our confidence in leucocytic counts.

In carcinoma there are no marked blood changes, except the anemic and blood destruction of extreme cachexia, which is in no respect pathognomonic. Leucocytosis is absent unless due to the absorption of septic material from an ulcerating area or from some intercurrent conditions.

Our experience with the variations in the leucocyte count have been given in a paper published in the *Philadelphia Medical Journal*, of June 1st, 1901, and we will not infringe upon your time to repeat them here. But in a summary we will say that the leucocyte count, although at times very valuable, is often very disappointing.

Quite recently it has been announced that the way out of this difficulty lies in the differential count, in which an increase in the polymorphonuclear leucocytes will show the presence of pus without an absolute increase of the leucocytes. Let us hope that this statement will be verified and remove the discrepancies we have found, but as yet this theory has not been investigated fully enough to be conclusive.

The differential count is very valuable in the diagnosis of pernicious anemia and the various forms of leukemia and these diseases cannot be positively diagnosed or eliminated without a differential count. It is said to be of value in the diagnosis of trichinosis, but with its value in this disease we have had no experience.

With the differential count in suppurative conditions the benefits received have been purely negative in character. The theory of the polymorphonuclear increase already mentioned has not as yet been of any practical benefit to us, yet we cannot say that in the future it will not prove of value.

Although we have made a few examinations of the alkalinity and specific gravity of the blood, their results were entirely inconclusive.

This paper, as we have already said, is in no way a complete review of the value of blood examinations in surgery, but is only some of the more prominent experiences met with in a general surgical practice. There are many diseases in the diagnosis of which blood counts might be and are of value, and also many conditions not mentioned here that interfere with their usefulness.

We have no desire to belittle the real value of blood examinations, for the preceding pages show that they have very often been of greatest value to us. What we do object to is the unfounded claims that have been made for this procedure, which experience does not bear out and which are almost sure to deceive practitioners and lead them into errors likely to sacrifice valuable lives. For instance, the statement that hemoglobin below forty per cent. precludes successful operation, if followed out would cost many lives by denying to patients the benefits of operation. Then the statements concerning appendicitis that have appeared from time to time in the medical journals that certain operators depend upon the blood count alone to indicate the time and need for operation in this condition. And so with many other inaccurate though rosyhued, statements, which, unless protested against are likely to deceive all but the most experienced.

We have mentioned in another communication the many antifacts that may interfere with and negate the value of the blood count, such as physiological and drug leucocytoses, errors in technique, etc., and will not repeat them here.

Therefore, let us make use of blood examinations, but not view the results through such rosyhued glasses that we cannot see their inaccuracies and limits of usefulness.—*The Philadelphia Medical Journal*.

HARD ON THE THROAT.—“Throat trouble, eh? And you are a musician? Music is often very hard on the throat. What instrument do you play?”

“The bass drum, doctor.”—*Phil. Times*.



### The Maltine Company's Prize Essay Contest.

Believing that a proper exercise of preventive medicine is of incalculable importance to the human race, and desiring to stimulate further research in this line, or at least to disseminate some of the newer ideas so prominently discussed by the medical profession of recent years, we offer two prizes, a first prize of one thousand dollars and a second prize of five hundred dollars in cash for the best essays on that subject.

#### CONDITIONS OF THE COMPETITION.

First.—Essays offered in competition must treat the subject of Preventive Medicine in its various relations to the welfare of the human race, either treating the topic in its broadest scope as affected by disease, custom, environment, heredity, etc., or from the view-point of the specialist who contends that the most potent factors inimical to mankind result from special conditions which he is enlisted to combat.

Second.—In order that there may be no violation of medical ethics and no suspicion of mere commercialism on our part, Maltine or any of its combinations *must not be mentioned or even indirectly alluded to in the essays.*

Third.—Competition is open to graduates of all recognized medical colleges.

Fourth.—The essays will be judged by the following gentlemen: Daniel Lewis, A. M., M. D., New York, President New York State Board of Health, Professor of Special Surgery (Cancerous Diseases), Post Graduate Medical School, Surgeon to the Skin and Cancer Hospital, Editor *Medical Review of Reviews*; Charles A. L. Reed, A. M., M. D., Cincinnati, Ex-President American Medical Association, Ex-President American Association of Obstetricians and Gynecologists, Fellow British Gynecological Society; John Edwin Rhodes, A. M., M. D., Chicago, Associate Professor Diseases of the Chest, Throat and Nose, Rush Medical College, former Professor of Physical Diagnosis and Clinical Medicine, Northwestern University Woman's Medical College, and the prizes awarded in accordance with their decision.

Fifth.—The essays are to consist of at least ten thousand words.

Sixth.—Each competitor is to send us three typewritten copies of his essay by mail in a sealed envelope. These copies are not to be signed by the author, or contain anything which might point to his identity, but are to be signed with a *nom-de-plume*.

Seventh.—Another sealed envelope shall be sent to us, containing this *nom-de-plume*, together with the author's name and address. This envelope must be endorsed "For Identification," and will remain sealed until the judges have decided upon the two prize-winning essays, and will then be opened in order that the names of the successful competitors may be ascertained.

Eighth.—The prize essays and any others which are deemed suitable will be published in a medical journal or journals subject to the approval of the authors.

Ninth.—We reserve the right to republish any of these essays in pamphlet form, restricting the circulation to the medical profession.

Tenth.—Essays entered in competition must be in our hands by September the 1st, 1902.

THE MALTINE COMPANY,  
8th Avenue and 18th St.,  
Brooklyn, New York.

#### The Fulfilling of Prophecy.

HERBERT A. PARKYN, M. D., of Chicago.

It is a common belief among physicians who lack a knowledge of Suggestive Therapeutics, that no cures of genuine troubles are made by such forms of treatment as Christian Science, etc. They will admit that this sect is growing stronger every year and that the wealthiest and most influential classes in our great cities are flocking to the Christian Science standard; notwithstanding, they say "Oh, it is only a fad which will soon die out. These healers may be curing hypochondriacs, hysterical or emotional persons suffering from imaginary complaints, but they do not cure genuine physical ailments, and the failures which will naturally follow their attempts to treat genuine troubles will soon sound the death knell of this system of healing!"

Let me say to any physician who may be holding such belief, that he is laboring under the greatest error of his life—one which, unless removed, is likely to affect his pocket-book and his success in the near future.

Every day brings forth hundreds of cures of genuine troubles which are credited to the subtle workings of Christian Science, and every cure convinces hundreds of people that after all, there may be some good in Christian Science. The average layman is unacquainted with the causation and cure of disease, and if a friend has been cured by any system of treatment, that circumstance

is sufficient to arouse a belief in his mind that there may be some virtue in that special form of healing, even though it be generally *denied as a charlatanism*.

Systems of natural, drugless forms of healing are springing up and spreading at a terrific rate. Every fair sized town or city in the union has its schools of magnetic healing, christian science, hypnotism, vitapathy, osteopathy, etc., and curious as it may seem, the aggregate number of students in attendance at these schools in a year, is almost double the aggregate attendance at the medical schools in this country. Every graduate from these schools locates somewhere, and through the liberty of the press and other forms of printer's ink, is surrounded by a clientele in a month or two, that the average young physician is not likely to secure in several years of ethical practice.

To be sure, the majority of patients who seek relief from these drugless systems of healing, are sufferers from chronic troubles. Many of these patients are cured, and most of them declare they receive some benefit. If a patient be cured of a chronic trouble by one of these healers, his relatives and friends seek that healer when suffering from acute troubles; believing that if it is possible for a healer to cure a chronic trouble, he certainly will have no difficulty in removing an acute one. The healer, in short order, has his offices filled with cases of every description and rapidly builds up a great reputation, for the majority of acute troubles, as every physician knows, will disappear without the assistance of any system of healing whatever. But if a healer has had anything to do with an acute case, and the patient recovers, the healer gets the credit for the cure.

From the observations I have been able to make, and the reports I have received, I find that the mental scientists, magnetic healers, etc., all over the country, seem to be uniformly successful from a financial point of view; and they are able to obtain gilded testimonials from most of the people whom they have treated.

Many years ago, after I had demonstrated to my entire satisfaction the value of suggestion as a therapeutic agent, I predicted that unless our medical colleges instituted a course in suggestive therapeutics, and unless graduated physicians took up the study of medical psychology, the time would come when laws restricting the practice of medicine to graduates of regular medical colleges, would become a thing of the past. That this prediction was not chimerical, is already manifest, for today there are "healers" of

every description, in every town and city, in every state in the Union, and the medical laws are uniformly powerless to prevent them from practising. Occasionally we hear of one of these healers being convicted for practising without a license from the state board of health; but where one of them has been convicted, a hundred have been permitted to continue practising, and a dozen have come to take the place of the convicted one.

At the present moment a movement is on foot among the mental, magnetic, and other healers, to form a national union for mutual protection. When this union is formed (as doubtless it will be) it will represent greater numerical strength than the physicians of the United States do; and when the scores of followers of each healer are added to the number, it is very evident our conservative physicians will have a tough proposition to face. Already in several of the states the medical acts have been vetoed, and the more these healers are prosecuted, the sooner will the prediction I made be verified. The other Richmond is in the field, and there is but one thing left for our physicians to do, *i. e.*, to study the force by which these healers make their cures, and employ it themselves. When they do this, and teach their followers what suggestion is, and how these healers make their cures, christian science, magnetic healing, etc., will die a natural death; for these systems of healing fail in many instances in which a physician would be successful, and physicians who do not understand suggestive therapeutics fail in many instances in which a mental healer would be successful. The proper system is a combined one, and a physician who has a knowledge of suggestion is the master and superior of a healer without medical training, or a physician without a knowledge of suggestive therapeutics.

It has been my experience that if ten average physicians be asked what they think about suggestive therapeutics, nine of them will say that it is a fake, or a fad, and that they have not time to investigate such nonsense. Poor fellows! It is just this narrow-minded bigotry that has brought about this crisis. They refuse to study the law of suggestion and employ it, still they wish to prosecute any one who attempts without a license to use it. A contemporary humorously signifies the situation in this way:

First doctor: "There's a new psychologist in town curing lots of people."

Second doctor: "Is that so? We must have the rascal arrested!"

Imagine what the laity would say if the

doctors refused to employ either chloroform or ether, or to investigate their merits for surgical operations, and passed laws to prevent anyone else from using them. The laity, having familiarized themselves with the advantages of these wonderful blessings, would rise up in their wrath and crush such conservatism. Now this is exactly what is being done with suggestive therapeutics. The laymen are familiarizing themselves with the subject and are healing and being healed by it in various guises, and they will soon be called upon to pronounce for or against it.

Physicians are not the class who will be permitted to pass final judgment on the practice of the healing art. The hundreds of thousands of Christian Scientists, Magnetic Healers, Neuropathists, Hypnotists, etc., with their legions of followers, will certainly have something to say in the matter.—*Suggestions.*

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#### CHRISTIAN SCIENCE.

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GEORGE H. MEANS, M. D., Winchester, Ky.

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Having been requested by a friend to give my views concerning the book called "Christian Science," by Mrs. Baker Eddy, I herewith comply with that request.

The comments are necessarily brief. But I believe they are sufficiently comprehensive to give a correct idea concerning the teachings of the book, even to those who have never read it.

If my comments are plain declarations of my convictions, they are not abusive. The honest dupes of a delusion are to be reached by argument and not abuse. My views are as follows:

The book is not even good nonsense. It is *idealism* run to seed. Science does not teach a *single truth* in this book. Psychology and philosophy are strangers to every proposition it contains. Theology is made to mean anything it does not mean, and Bible truths are denied all the way through. Professing to take the Scriptures for a textbook, the author "wrests" them to the destruction of common sense, universal experience, observation, experiment, intuition and inspiration.

The book denies the existence of matter, and yet claims that matter is the cause of all error. It then denies the existence of error, and yet declares that error is cured by truth. It denies the existence of sin and sickness,

and then proceeds to give the remedy for both.

It declares that sickness exists only in belief. To believe that you are well is to be well. What about infants and idiots who have no belief? What about consumptives, who cannot be persuaded that they have consumption? What about people who have Bright's disease and never dream of having it until informed by doctors?

If men are healed by Christian Science, God must do the healing. It is as easy for God to grow on a leg or arm, or restore a lost finger, as it is to cure a boil. But does he do this?

If Christian Science is all that is claimed for it, there ought to be at least one case on record where God restored an amputated limb, but no such case has ever been found. The book denies the existence of doctors and drugs, and yet condemns them.

It denies the existence of sex and yet lays down rules for a happy marriage.

The book makes God all in all in the sense that he is mind, soul and life of everything. Man is only God's idea, he has no real existence, he is a nonentity, and yet "God's idea" has an idea that he is sick and Christian Science cures this idea.

*The world has no real existence.* Its accidents and incidents are all a dream. Its sins, sicknesses and crimes are all delusions of mortal mind. Its marriages, courtships, commercial affairs, and all its transactions are chimeras, the mere phantasms of disordered minds, and yet the author demands something more than imaginary money for her books.

Christian Science denies the existence of death, the reality of dissolution, and yet its believers die like other people and with similar diseases.

If disease exists only in the mind, what about a sick horse? Does the brute creation only believe it is sick? If a cow loses a horn, does she only believe that she has lost it? If so, then a muley would only have to be convinced that she is not a muley and horns would begin to sprout.

Says the book, "It can never be said of a mortal that he has a mind of his own, distinct from God." Then God only is responsible for all this silly belief about sickness, sin, and all the countless errors into which man has fallen.

The book declares that there are no such things as hunger and thirst, and yet the author continues to eat and drink like ordinary mortals. The author declares that

hate, slander and persecution are delusions, and then warns her followers that they will be hated, slandered and persecuted for their belief.

The author sets up men of straw. She combats the idea that mere matter can feel and suffer, when no one claims that it can. She combats the idea that God makes men sick, when no one claims that He does. She combats the idea that evil is more powerful than good, when no one contends that it is. She makes theology say what it does not say, and then proceeds to demolish her men of straw with the complacency of Don Quixote.

The book declares that "mortal existence is a dream." Then Christ never lived in the flesh, and consequently never died for men.

According to this book, the prophets and patriarchs who labored, the apostles and martyrs who suffered and died, were all mistaken. The ripest scholars, the deepest thinkers, the wisest philosophers of all ages have been the dupes of delusion until Mrs. Eddy appeared upon the stage to flood the world with light and truth far more luminous than that which was reflected by Christ, the world's Redeemer. Christ only had a faint glimpse of truth; Mrs. Eddy has it in all its fullness.

In the glossary of the book about one hundred and twenty definitions are given of Bible names. Not a single definition is correct. Not one corresponds to any dictionary, commentary, lexicon or text-book known to man. A glossary is supposed to be a vocabulary of antiquated words. The meanings attached to words in this book must have been the significance they had before time began. But then, as there are no such things as time and words, one meaning is just about as good as another.

The book declares that *old age* is not a reality; like everything else undesirable, it is a delusion. It gives the instance of a jilted maiden waiting for her lover's return; being insane she takes no note of passing time, and at the age of eighty years she looked as fresh as in her youth. The name of this faithful and wonderful maiden is not given.

The author claims to have cured a few cases of broken bones and dislocated joints by her hoodooism, but she wisely suppresses the names of her patients. She mentions a few cases of cures, and gives names of patients when it is possible, if not probable, that there was nothing organically wrong.

If she could give names of those cured of a fever, why not give cures of patients with broken bones? The author claims omnipotent power for her system of healing, but in the preface to her book she very shrewdly and wisely says that she "takes no patients and declines medical consultation." So this healer of mankind, this modern oracle, dispenser of light, truth and curative power, declines to put her own theory into practice for the benefit of mankind.

The whole theory is superstition, pure and simple. "Christian Science" is neither Christian nor scientific. It is a medley of contradictions, absurdities and incongruities. No one can understand the book, nor harmonize a single statement with reason, revelation, science, art, observation or the common experiences of men. But all superstition has a basis in fact, and the whole superstructure of Christian Science—falsely so-called—is based upon the influence of mind over mind, and to a limited extent over the body. The fact is illustrated in hypnotism, and even in the ordinary suggestions made to men. Nervous affections, premonitions, hallucinations and all kinds of mental delirium are often cured by the power of simple suggestion.

The hoodooism of the heathen, the witchcraft of the past, and even the hypnotism of our day illustrate the power of suggestion, i. e., the influence of mind over mind. Now, Christian Science, so-called, has this, and only this for a basis, and on this the author has built a superstructure in which all men may find a refuge from sin, sickness, error, crime and all the ills of life—it is a house built upon the sand.

We are encouraged in God's word to pray for the sick. So we are to pray for daily bread. But we are to work for bread as well. God works through human agencies. If we are to work for bread we are to doctor for disease. Prayer is important in both cases, but prayer, like faith, without works is dead, being alone. The sick are to be doctored and not hoodooed.

The theory, if the book can be said to have a theory, is not logically stated, grammatically expressed nor scientifically true. It agrees with no scientist, living or dead, in a single proposition. It is out of harmony with all Scripture, antagonistic to all theology, opposed to all human philosophy, incomprehensible to human understanding, and in everything contradictory to itself.

According to this book no one ever really lived in the flesh, therefore, no one ever

really died. No one has ever been healed, because no one has ever been sick. No one can do wrong, because there is no such thing as sin. Christ never saved anyone, because no one was ever lost. Christ did not die, because he never lived—"moral existence is but a dream."

The Bible can mean nothing for it was never written—"matter does not exist." Therefore the prophecies were never uttered, the martyrs never suffered, the apostles never taught, no plan of redemption was ever devised and no hope of heaven was ever offered. Nothing ever occurred in this world. "Evil has no reality. It is neither person, place nor thing—nothing is real but God." There have been no wars, nor floods, nor pestilences, nor misfortunes, no pangs, nor pains, no groans, nor griefs, nor graves, no tears, nor tumults, no widows, nor orphans, no crimes, nor criminals, no murders, no suicides, no drunkards, no liars nor thieves, nor adulterers, nor Sabbath-breakers. There is no slander, no deceit, no covetousness, envy, malice nor hate, for "evil has no reality. It is neither person, place or thing."

And yet the author says, "sorrow has its own reward." "Trials teach mortals not to lean on an earthly staff." "Sin brings suffering as much today as ever before. They who sin must suffer." How can one sin, when there is no such thing as sin? How can one suffer when there is no such thing as suffering?

The author says: "The belief that man has existence or mind separate from God is a dying error." Man, then, is a part of God. When he sins a part of God sins, when he suffers a part of God suffers, and if lost a part of God is lost. God, then, becomes responsible for all the evils and suffering in this world, and, what is most surprising, He suffers the penalty Himself, and inflicted by Himself, for His own misdoings.

Says the book: "If you succeed in wholly removing the fear the patient is healed." But there is no such emotion as fear. Besides, infants have no fear of disease, nor have idiots, nor men on the verge of the grave with some disease unknown to them. Besides, the patient cannot be healed, he is not sick, and in some cases—like that of a lunatic—he does not even believe that he is sick. The author speaks of the "weariness" of her own "hope." Hope is this. Hope presupposes the existence of some evil. It is the desire and anticipation of better things. But according to her view there is no evil—

all is good. There are no better things for "God is all in all." There is no weariness, and the author herself is the dupe of a delusion from which she would deliver others.

But perhaps this is not the only delusion that gives her trouble. Is she growing old, or does she flourish in the springtime of perpetual youth? Have gray hairs and wrinkles come, at about the age when these delusions appear, to mark the approach of life's closing day? If the apostle of this new science is herself an exception to the rule that "man is born to trouble," that the "days of our years are threescore and ten" and that "it is appointed unto men once to die," it will go very far toward establishing her theory, even though no mortal can understand it.

But to conclude. If the book could be understood, if it presented anything tangible to the common perceptions of men, if its statements were clear and consistent with themselves, if its truth harmonized in any way with the experiences of mankind, or if its positions were in accord with Scripture or science or reason, there might be some reason for accepting it. But the whole work is an enigma.

"It wriggles in and it wriggles out,  
Leaving the hunter still to doubt  
Whether the snake that made the track  
Was going away or coming back."

Not a word of proof is offered to sustain the whole fabric. Not a syllable of evidence is produced to substantiate even these wild and incoherent vagaries. Nothing but the dictum of an erring mortal, who is herself subject to the evils she affects to deplore or disregard. "I have proven," "I have proven," is her constant watchword, but the reader looks in vain for a single demonstration. The author may be sincere, she possibly is. A mind unbalanced is generally sincere in its assertions and positions. But there is method in this woman's madness. While she personally refuses to "take patients and declines medical consultation," yet her disciples must use her books as the all-potent means of healing the sick, and any other book written upon this subject is literary theft, and is therefore forbidden. She has explored all the avenues of truth and nothing more remains to be said.

Perhaps, after all, this is wise (at least shrewd), for if a system is absolutely perfect nothing can be added to it beneficially.

According to the theory of "Christian Science," all the wisdom of all the ages is concentrated in one woman—Mrs. Baker Eddy. All the philosophers and theologians,

all the commentators and scientists, living and dead, have been mistaken. The patriarchs, prophets, apostles and martyrs were dupes of a silly delusion. Even Christ Himself, in His mortal agony upon the cross, did not suffer, for "suffering is a delusion of the mortal mind."

Happy must be that people who hold in their hands the key to the reservoirs of infinite wisdom and eternal truth.—*Suggestion.*

#### Prevention of Postoperative Adhesions of the Peritoneum.

One of the most formidable complications of abdominal operations is the development of intestinal obstruction incident to peritoneal adhesions. This obstruction may be immediate and may cause death, which is too often attributed to peritonitis. The obstruction may also be partial and may not develop for months after the primary operation, in which case the patient is likely to suffer from dyspepsia and from pain varying in intensity and position in accordance with the degree of the obstruction and its seat. Such pain is frequently attributed to a visceral lesion, and its true cause is not indicated until a second laparotomy demonstrates its mechanical nature.

Ward (*American Journal of Obstetrics*, June, 1901), in his valuable paper upon this subject, points out that the commonest form of adhesion is that of a loop of intestine to a raw surface, and that the obstruction rarely occurs except when the loop of intestine has become fixed in an abnormal position, the normal relation of the coils having been disturbed by operative interference. He quotes Walthard, who in the course of an experimental research performed supra-vaginal hysterectomy upon a number of rabbits, great care being taken that the peritoneal surfaces of the uterovesical pouch should not be touched in any manner; the parts, however, were freely exposed to the air. At the post-mortem it was found that in every case adhesions had formed between the peritoneal surfaces of the uterovesical pouch. His deductions from another series of operations were to the effect that the air contact causes these adhesions. In his investigations with reference to the effect of air contact on isolated areas, he found no adhesions of the intestines where they had been protected from such contact. Control experiment in this last series, in which the exposed parts were kept protected with hot salt solution, yielded perfectly normal conditions. He next found

that peristalsis tended not only to prevent adhesions, but in some cases even to tear out the retaining sutures where a coil of intestine had been exposed to air contact of twenty minutes before being folded so as to bring the serous surfaces together. He studied the effects of filtered air upon the peritoneum, and the post-mortems always showed the formation of adhesions. The peritoneum was then exposed to steam at 30° C., and in all cases adhesions were absent; hence the conclusion was reached that by the prevention of dryness adhesions can be avoided. The results as to the chemical action of the component parts of the air on the peritoneum were all negative as to formation of adhesions, provided there was the presence of moisture. Dry air at 38 C. showed the formation of adhesions and microscopical changes of the peritoneum.

Walthard believes that after long contact with air the resisting powers of the peritoneum are so diminished that the number of microorganisms necessary to bring about a fatal peritonitis is greatly reduced.

The practical application of Warthard's results appears to Ward to be the abandonment of dry asepsis and dry toilet of the abdominal cavity, and that moist asepsis, and as far as possible protection of the peritoneum from air contact, should be practiced.

It may be said that the formation of peritoneal adhesions after operation is directly proportionate to the amount of sepsis, traumatism, dry-air contact, loss of heat, and raw surface there is present.

The less the vitality of the various tissues is lowered by prolonged exposure, lowered temperature and traumatism, the less infection there will be, so that the home-guard army of leucocytes may be kept active and vigorous to repel the bacterial army of invasion threatening the organism.

Much handling of the bowel predisposes to subsequent paralysis or pseudoileus; and in view of the action of peristalsis on the prevention of adhesions a very slight impediment, as a recently formed adhesion, will result in a serious and perhaps fatal obstruction if the adjacent bowel remains paralyzed for a few hours.

In the after-treatment of laparotomized patients for the prevention of adhesions, the employment of early catharsis to provoke active peristalsis, provided it be employed early, is of value. Sometimes it is not wise to employ this procedure, and in such cases an early resort may be made to the use of the copious high enemata in conjunction with the cathartic. To be employed early also,



in the Trendelenburg posture, oxygen to inflate the intestines may be tried. Free motion of the patient after a laparotomy is undoubtedly a preventive of adhesions. The patient should be encouraged to frequently change her position in bed during the early hours after an operation, as then the newly forming adhesions are broken up and the intestines will be more likely to assume their proper relations.

To summarize: Prevention is aided by surgical cleanliness; by the avoidance of raw surfaces and pedicle stumps by covering them with peritoneum or grafts of omentum, and the abandonment of the ligature *en masse*; by protecting from dry-air contact; by rapid operation; by keeping up the heat of the peritoneal cavity by frequent renewal of the hot salt solution (115 F.) and by protection of the exposed parts; by avoidance of excessive manipulations of the intestines, by technical skill, proper ante-operative preparation of the bowels, and posture, to prevent pseudoileus; by replacement of the loops of intestine and omentum, by filling the abdominal cavity with hot salt solution before closing, and thus floating them; by the encouragement of motion by the patient after the operation; and by the early use of the high enema during the first twelve hours in conjunction with cathartics, and, on failure, the prompt use of oxygen in the Trendelenburg posture.—*The Therapeutic Gazette*.

#### Prof. Virchow on Human Experimentation.

Considerable excitement has recently prevailed in Germany regarding vivisection, but Prof. Neisser added the last straw by his experiments, which consisted of the inoculation of a number of subjects with an anti-syphilitic serum.

Prof. Virchow, who was appointed by the government to investigate these experiments, made a report which will be commended by the profession at large as eminently just and scientific. We quote an abstract of the same as furnished by the Associated Press:

"The government's ministerial representative had declared that it 'was merely a question of single cases which would be nowhere so severely criticised as by the medical circles, who by their self-devotion and self-sacrifice set the best examples to the citizens.' Professor Virchow likewise considered that it was a question of single cases. He condemned Neisser only because he did it without the permission of the people and relatives of the children. He spoke at length

on the 'reasonableness' of inoculation and the hope that an antitoxin for the loathsome disease the girls were inoculated with will be found. This unfortunate affair will not prevent young doctors from seeking some such cure, he said. He begged the Chamber not to judge animal experiments from a sentimental standpoint. It is impossible to progress without experiments, and when we reach that point when government will authorize the serum-therapy and found a Royal Institute especially for it, and place it in reach of the public, and show that no danger is connected with it—it will then be shown that we cannot use it without animal experiments. The serum therapy is absolutely impossible without animal experiments. 'When a certain point in it is reached, it will be quite natural, and I cannot consider it a folly or wickedness or a crime, if the experiments have been proved on animals, to try them on man. Yes! gentlemen, it is the only way, and it is done continually. It is very difficult to fix a definite boundary line as to experiments; in my opinion it should be left to the right dictates of the doctors, and when we reach that point of educating truly conscientious doctors, it will be the best guarantee the public can have. This conscientiousness would be strengthened by control. Control belongs to it. When a man works all day without control, it happens that he becomes careless and oversteps the boundary. It is human; relaxation takes place, then many people forget what is fitting, and thus abuses occur which should never have taken place.' The learned and celebrated professor spoke mockingly of the agitation which hysterical ladies promoted against experiments on animals, and maintained the right of scientific experiments in principle, and of using the experience gained by animal experiment by degrees on men."—*New England Med. Monthly*.

#### The Action of Phlorhizin on Muscle.

By FREDERIC S. LEE and C. C. HARROLD.

In investigating the causes of muscle fatigue the action of phlorhizin on muscle has been studied. One gram of phlorhizin dissolved in sodium carbonate was injected three times a day into fasting cats, and the administration of the drug was continued for from two to over four days. The animals were then killed and the course of fatigue in the tibialis anticus was studied. Instead of giving 800 to 1,000 contractions, of which



the normal muscle is capable, the phlorhizinized muscle gives 200 to 400. The curves of contraction of the latter clearly resemble the later contraction curves of the normal muscle when undergoing fatigue, being low in height and the phase of relaxation being somewhat prolonged. The phlorhizinized muscle hence is comparable to the normal muscle in the late stages of fatigue.

Is this result due to a specific action of the drug on the protoplasm of the muscle cells, or to the loss of carbohydrate? Irrigation of the muscle with phlorhizin dissolved in sodium carbonate diminishes the number of contractions, but irrigation with sodium carbonate alone has the same effect. Hence it is probable that phlorhizin has no specific action apart from its influence on the organism which results in the removal of carbohydrates. This conclusion has been tested in another way. Animals were given phlorhizin for four days in the usual way, and then 50 grams of dextrose were administered by the stomach. Eight hours afterward the animals were killed, and the muscle fatigue was studied. Such muscles gave 650 contractions, the first 100 of which were quite normal, the later ones showing the lengthened relaxation. The dextrose had counteracted the effect of the phlorhizin and largely restored the muscle.

The provisional conclusion is strongly suggested that the loss of carbohydrate is an important factor in the early phases of muscle fatigue. Moreover, the administration of dextrose would seem to bring the muscle out of its fatigued condition. No conclusive chemical tests have yet been made, but they will be performed later. It will be necessary to test the phlorhizinized muscle, both as to the actual loss of carbohydrate and the possible accumulation of products of proteid decomposition.

Incidentally some observation on rigor have been made. A well phlorhizinized muscle begins to go into rigor within five minutes after death, and rigor may be complete within twenty to thirty minutes. This accords well with Miss Latimer's experimental results. Irritability of the muscle to direct stimulation. On the contrary, a muscle so irrigated is capable of giving one thousand contractions, fully as many as, or more than, a normal muscle without dextrose.—*The American Journal of Physiology*.

The Maine Medical Association meets in Portland, June 4, 5, 6, 1902. The Special Committee on Abuse of Medical Charity will render a report.

### The Injection and Operative Treatment of Inguinal Hernia.

Scully (*Med.*, Apr., 1900) says the injection treatment for inguinal hernia is often successful in those recent cases that may easily be retained by a truss. Herniæ of long standing and of difficult retention are, at times, relieved by the injections, but the majority are not. Over 95 per cent. of inguinal herniæ may, however, be cured by an operation, and the author advises this in all cases, employing the injection treatment in certain cases in which operation is refused. The following solution is employed:

Fluid extract quercus alba,	1½ oz.
Solid extract quercus alba,	1½ dr.
Carbolic acid crystals,	2 dr.
Iodin resublimed,	2 dr.
Morphin sulphate,	10 gr.

Mix the carbolic acid and iodine thoroughly in a mortar, add the other ingredients, and triturate thoroughly.

Twenty minims is the maximum quantity for an injection. Before using the injection a perfectly fitting truss is secured and the field of operation and syringe thoroughly cleansed and asepticated. The needle should be a stout one, 1½ to 2 inches long. Place the patient in a recumbent position. Having reduced the hernia, the index finger is placed in the inguinal canal by invaginating the skin over the external ring and pushing the finger up the canal until the tip reaches the internal ring. By feeling over the site of the internal ring the tip of the finger in the canal can be felt, and the needle should be inserted at this point, directly over the finger-tip, and pushed down quickly until it passes the end of the finger; 3 to 5 minims should then be injected slowly, and as the finger is withdrawn slowly the needle is made to follow it for about half an inch, during which time the fluid is still injected slowly, and when the 20 minims have been injected, the needle should be withdrawn suddenly, to avoid depositing any of the fluid in the subcutaneous tissue; if the latter occurs, it causes intense burning for a short time. The truss should be placed in position immediately, and the patient should lie down for about half an hour. If there is much pain after the injection, the placing of a hot-water bag over the site of the injection will soon ease the pain. The injection should be repeated once a week for 3 or 4 weeks, when, if the hernia does not come down after having taken the truss off, and having tested it by the patient coughing or stooping, you need give no more injections. The truss should be worn for at least 4 weeks

longer, when, if the patient desires, it may be left off. In most cases, it is well to advise a truss to be worn for from 4 to 6 months; one with a large soft pad is preferable.—*Medical Magazine*.

### Miscellaneous.

#### A Diet of Ground Rock.

The report of the Connecticut Experiment Station just issued contains (page 165) a somewhat startling arraignment of the alum baking powders with which the country is flooded. Of the fifteen brands analyzed, about every imaginable adulteration was discovered, varying from sulphuric acid (22 per cent.) to ground rock! The latter form of adulteration is characterized by the report as "particularly reprehensible adulteration, because very likely to prove injurious," which may well be believed, considering that it was found in one sample to so large an extent as over 25 per cent. Of this baking powder the report says:

"This preparation contains more than 25 per cent. of a ground rock, insoluble in strong acids and consisting chiefly of silicates of magnesia. Prof. S. L. Penfield, of Yale University, kindly examined this material and found it to be a mixture of pulverized talc and tremolite, a species of hornblende, which is extensively mined in northern New York, perhaps elsewhere, and is much used as a filler in the paper manufacture. The tremolite appears under the microscope in sharp needle-like splinters, which make it a dangerous admixture in food."

Alum itself is objectionable enough, and it is therefore not surprising that a manufacturer so unscrupulous as to use it would not hesitate also to mix in pulverized rock. This only goes to show the danger of using any of the cheap grades of baking powder. They are put on the market by small concerns who have no reputation to lose and care nothing for the public health. The cream of tartar powders, on the other hand, though costing a little more, are made by large and responsible firms who have too much at stake, even were they so inclined, to father anything but a chemically pure article.

The family physician may not find it practicable to overhaul the larders of all his patients, but the knowledge he possesses of the dangerous character of alum powders ought to be communicated, particularly in cases where digestive and similar troubles

are indicated. There are two or three cream of tartar baking powders whose names have become "household words," and from them the housewife may safely make her selection.—*New England Medical Monthly*.

#### The Etiology of Acute Tonsillitis.

There is no room for doubting that the vast majority of cases of acute tonsillitis are of bacterial origin. *Staphylococcus pyogenes aureus* and *albus* give rise to about 80 per cent. of the cases, while the remaining 40 per cent. are usually put down to the credit of the *streptococcus*. Observations made in 2,000 cultures showed that there was a tendency at first to consider every organism that showed cocci in a chain arrangement as *streptococcus pyogenes*, and small cocci in bunches as *staphylococcus pyogenes*; likewise bacilli arranged parallel and showing transverse striations generally passed for *Klebs-Löffler bacilli*. It is probable that most bacteriologists have made the same errors.

The anginas are classed as follows: (1) Those caused by *pneumococcus*, the largest and most important group. (2) Those caused by the *diphtheria bacillus*. (3) Those caused by the *streptococcus pyogenes*. (4) Those caused by the *diplococcus scarlatinae*. (5) Those caused by the *influenza bacillus*. (6) Those caused by the *staphylococcus pyogenes*. (7) Mixed infections, two or more of the above germs being present in a given case.

There is good reason to consider the *pneumococcus* as the causative factor of a large percentage of the fevers of childhood, and that the angina caused by this organism has been generally overlooked, especially in very young children. The contagion from a case of scarlatinous sore throat is capable of giving rise to typical scarlet fever in another person who has been exposed to it.—*Arch. of Pediatrics*.

#### Substitution: A Medical Evil.

The *Medical News* of August 24, 1901, has this to say of this important matter:

"We physicians hardly realize that substitutions and adulterations are as diligently worked off on us and our patients as in the patent medicine field; that non-official leaves are ground up with official leaves; that tinctures are made from fluid extracts instead of from fresh drugs; and that old, weather-

beaten drugs are sold in the market for use in the preparation of potent remedies.

"The high-class pharmacists of the large cities are so wholly above reproach that we would depend on their testimony rather than on our own in deciding about the purity of drugs used; but who of us whose prescriptions every day are filled up-town and down-town, in the suburbs and in neighboring cities, have any guarantee that they are filled in such a way that they will have the strength and potency that we in all good faith prescribe?"

"The United States Pharmacopœia is the official code which determines the strength of all preparations, and on it the profession base their prescriptions; but it is a startling fact that although the last twenty years have been the most brilliant in research work in the physiological reaction of drugs, yet far too many pharmacists are using the Pharmacopœia of 1880, if they use any at all, the edition of 1890 not having as yet gotten past the minority.

"We may not take the matter of substitutions quite as seriously as do our friends who dispense drugs under their signatures, but we certainly ought to treat it more seriously than we do; for our reputation, as well as our patients, will undoubtedly suffer. That we permit this state of affairs to exist at all is due to the very wide-spread carelessness mingled with the trustful ignorance with which we put our prescriptions in our patients' hands, not knowing where or how they will be filled."—*The Therapeutic Gazette*.

**THE TREATMENT OF INOPERABLE CANCER.**—Professor Czerny (Heidelberg) read a paper at the recent meeting of the German Surgical Congress on the treatment of inoperable cancer. He estimated that about seventy-five per cent. of known cases of cancer were inoperable, and that in Germany nearly 40,000 patients died yearly of this terrible disease. The treatment of inoperative cancer was, therefore, a most important question, and one which had not received sufficient attention. It was to be regretted that at the present day many surgeons lost interest in a case of incurable cancer, so that as there was no radical remedy nor operation for it, the patients were allowed to fall into the hands of quacks. Cases in which ulceration had occurred called in particular for skilled treatment. By careful bandaging and by keeping the ulcers clean much might be done to relieve the patients. The application to such sur-

faces of zinc chloride, by the use of gauze bandages dipped in solutions varying in concentration from ten per cent. to saturation, had a very good effect, and in some such cases recovery even took place under this treatment. Of course this was very exceptional, but in nearly all cases the patients were considerably relieved. In suitable cases the use of zinc chloride in solution or paste should be preceded by cauterization or scraping. For cauterization he preferred the actual cautery. The pain produced by the corroding action of zinc chloride did not last long, and could easily be kept within moderate limits by morphine. Subcutaneous injections of solutions of formalin were too painful. Sometimes arsenic had a remarkable effect upon these cases; it could be given internally, as by subcutaneous injection, or used as a paste or ointment. Potassium iodide was of value for the verification of diagnosis. After mentioning different applications, ointments and lotions which had proved themselves of value as palliatives, Professor Czerny stated that organotherapy had not given him satisfactory results, but he considered the treatment by the toxins of erysipelas was worthy of careful study in order that a definite opinion on its value might be formed. The mortality due to cancer was increasing, especially in the densely populated towns, as that produced by tuberculosis was diminishing. In conclusion, Professor Czerny suggested the erection of a German cancer hospital after the example of the English cancer hospital, of which he gave a brief description. The discussion was not productive of any novel views, but it was pointed out that the corroding effects of zinc chloride were sometimes attended by the danger of destroying the walls of a blood-vessel, with consequent serious bleeding.—*British Med. Jour.*

**ABOLISH THE CORONER'S OFFICE.**—In the press and letters from correspondents we notice occasional proofs that the proposal to abolish the coroner's office does not meet with entire acquiescence. The absurdity of the retention of this "medieval relic" in our civilization has often been shown, and those who advocate it should look into the matter carefully before opposing progress. As Dr. S. W. Abbott of Boston, has said, the fundamental objection against the "relic" is that at present the office combines in one person two incongruous functions. The first duty of the coroner is to determine the cause of

death, and for this a physician is required. The responsibility for death must also be fixed, and for this a lawyer is often required. Men expert in both sciences cannot be found in every town of the country. The coroner's jury is also a bunglesome and expensive method of reaching the truth which a single expert could educe much better. In case of homicide a jury in a court of law must also decide the responsibility of the accused, hence the first, or coroner's, jury is unnecessary. Medical experts should be appointed to replace the coroner and his jury, and their report should go to designated legal authorities for further investigation. In Massachusetts the coroner's office was abolished twenty-five years ago, and since then over 35,000 cases of deaths have been investigated inexpensively, thoroughly and satisfactorily. Scandals and absurdities attend the execution of the law wherever the office is retained. It was not long ago that a coroner's jury reported the following verdict: "This man died of stone in the kidney, which stone he swallowed when lying on a gravel path in a state of drunkenness."—*American Medicine*.

## News and Abstracts.

### Notice.

Will members of the Academy who have books belonging to the library please return them at once. The growth of the library necessitates a re-arrangement of the books on the shelves.

F. W. SEARLE, *Librarian*.

A very timely treatise on small-pox to sell at \$3.00 is announced for publication early in April by J. B. Lippincott Company. It is written by Dr. George Henry Fox, Professor of Dermatology in the College of Physicians & Surgeons, New York City, with the collaborations of Drs. S. Dana Hubbard, Sigmund Pollitzer, and John H. Huddleston, all of whom are officials of the Health Department of New York City and have had unusual opportunities for the study and treatment of this disease during the present epidemic.

The work is to be in atlas form, similar to Fox's Photographic Atlas of Skin Diseases published by the same house. A strong feature of the work will be its illustrations, reproduced from recent photographs, the major portion of which will be colored so as to

give a very faithful representation of typical cases of Variola in the successive stages of the disease, also unusual phases of Variola, Vaccinia, Varicella and diseases with which Small-pox is liable to be confounded. These illustrations number thirty-seven and will be grouped into ten colored plates, 9½ x 10½ inches, and six black and white photographic plates.

The names of Dr. Fox and his associates assure the excellence of the work, in which will be described the symptoms, course of the disease, characteristic points of diagnosis, and most approved methods of treatment.

### The Connection Between Ocular and Dental Affections.

Despagnet, Paris, (*Recul d'Ophthalmologie*) says ophthalmologists are probably recognizing more and more the real connection existing between dental and ocular diseases. The anatomical relations between the two are so intimately connected that it is apparent that diseased teeth should produce similarly conditioned eyes. The periosteum, which lines the orbital cavity, extends to the alveola border of the upper jaw; the mucous membrane of the mouth is in direct continuation with the conjunctiva. Many times the roots of the upper teeth extend directly into the antrum of Highmore, and from this situation disease frequently reaches the orbit through the thin partition of bone. The angular artery and certain veins run almost directly from one region to the other. The same general nerve supply reaches both, not only through the fifth pair, but also through the sympathetic system. Amblyopia, he believes, of which he cites a case, amaurosis, corneal ulcers and inflammations in general, various forms of conjunctivitis, strabismus, cycloplegia, and in fact troubles of almost every portion of the ocular apparatus, have been at times clearly traced to the teeth. Usually it is the upper teeth that require attention in these cases, but not always, as the lower ones are not infrequently to blame.—*Annals of Ophth.*

WHEN DREAMS MAY COME. — Patient: "Doctor, I dreamed something terrible last night. I saw my dead father."

Doctor: "What did you eat for supper?"

Patient: "A mince pie, doctor."

Doctor: "My friend, if you eat two mince pies to-night you will see your grandfather!"

# **Phillips' Emulsion** 50% best NORWAY COD LIVER OIL minutely sub-divided, WITH WHEAT PHOSPHATES (Phillips')

Pancreatized, Palatable, Permanent, Miscible in Water, Milk, Wine, etc.

# **Phillips' Milk of Magnesia** $Mg\ H_2\ O_2$ (FLUID.) "THE PERFECT ANTACID."

for correcting Hyperacid conditions—local or systemic.  
Vehicle for Salicylates, Iodides, Balsams, etc.

# **Phillips' Phospho-Muriate of Quinine, COMP.**

TONIC AND RECONSTRUCTIVE.

WHEAT PHOSPHATES, WITH MURIATE OF QUININE AND STRYCHNINE.

PHILLIPS' WHEAT PHOSPHATES (ACID).  
PHILLIPS' SYRUP OF WHEAT PHOSPHATES.  
PHILLIPS' DIGESTIBLE COCOA.

THE CHAS. H. PHILLIPS CHEMICAL CO., NEW YORK.

# **MELLIN'S FOOD**

has become the standard, be-  
cause it is a real food—a  
food that feeds.

*SAMPLES TO PHYSICIANS ON REQUEST.*

**MELLIN'S FOOD COMPANY, BOSTON, MASSACHUSETTS.**

**POLITICAL INFLUENCE OF PHYSICIANS.—**

There are enough physicians in every state to control medical legislation if they will only act together. Thackeray says that any woman without an actual hump can marry any man she pleases; man's safety is that women are like the beasts of the field; they do not know their own strength. The same might be said of the physicians of the country; they have not appreciated their own power. If quackery thrives and gains recognition and privilege under the law it is the fault of an inactive and unorganized medical profession.—[*Journal American Medical Association*.]

Gout and rheumatism is often a puzzle which many physicians have to solve with more or less satisfactory results. While defective elimination is the important factor, in both diseases, the skin, bowels and more particularly the kidneys are generally at fault. From this it is plain that any successful remedy must assimilate or oxidate and also eliminate the waste matter from the system.

I fully regard Chionia as an excellent remedy and am highly pleased with its action in all cases of hepatic torpor and can especially laud its action in many cases of sick headache. This is the first testimony I have given in twelve years and have absolute confidence in its physiological action.

J. B. YOUNG, M. D.

Newark, Ind.

**A PRACTICAL ACROSTIC.**—S. C. Mish, contributes the following unique acrostic to the *Cal. Med. Jour.* The initial letters in each case spell the names of the disability.

**FRACTURES.**

False point of motion.  
Rotary displacement.  
Angular deviation from normal angle.  
Crepitus.  
Tenderness on point of pressure.  
Unnatural mobility.  
Retraction of limb by muscular contraction.

Ecchymosis.  
Shortening, swelling and pain.

**DISLOCATION.**

Disturbance in function of joint.  
Immobility.  
Swelling.  
Loss of the natural contour of joint.  
Only forced mobility.  
Crepitations (false crepitus). No crepitus.  
Angular deformity.

Tenderness and pain.

Interference with function of joint.

Old landmarks of joint destroyed.

No shortening in shaft of bone.—*The Med. Stand.*

During La grippe and afterwards the experience of thousands of physicians proves the value of Angier's Petroleum Emulsion.

It braces the patient, enables him to withstand the ravages of the disease and guarantees him freedom from the subsequent exhaustion and sequelæ.

Angier's Petroleum Emulsion relieves immediately the cough and symptoms of respiratory irritation, palliates the nervous symptoms, and hastens convalescence.

"TWAS EVER THUS."—Bookkeeper: Old Dr. Smifkins was in this morning.

Publisher. What did he want?

Bookkeeper. He wanted us to advance him \$5 on his forthcoming book, "Hints to Young Doctors or How to Succeed."

W. H. Thompson reports eighteen cases of pneumonia treated with carbonate of creosote. Of these patients fifteen were males and three females, two were boys ten years old, while the ages of the others ranged from thirteen to forty-five, of these patients one (male) died, and the others made good recoveries. Carbonate of creosote may exert a special effort upon the course of pneumonia as shown by the temperature curve after its administration. The disease terminated in Thompson's series by lysis in twelve cases and by crisis in only five. In a number of cases a fall of the temperature from one to three degrees occurred within twenty-four hours after the remedy was given, but the next day it would rise again and so continue with a very irregular course for a number of days before it reached normal. Carbonate of Creosote (creosotal) seems to affect favorably the tympanites so often present. This writer has been impressed by the fact that the drug is better tolerated by the stomach for prolonged periods than any other agent of this class, such as creosote itself, or guaiacol carbonate. In pneumonia the writer recommends that it be given in fifteen grain doses every two hours night and day. He prescribes it in a mixture of glycerine and peppermint water. [T. L. C.]

**HARD CASE.**—De Kanter. Doctor wanted me to stop drinking between meals.

Soakley. And you are going to do it?

De Kanter. Well, I offered to compromise. Told him I'd be willing to stop eating between drinks.—*Exchange*.



THE BEST RESULTS ARE ASSURED IN BROMIDE  
TREATMENT WHEN YOU SPECIFY

# PEACOCK'S BROMIDES

AND THE GENUINE IS DISPENSED.



NEUROLOGISTS and General Practitioners prefer it because of its superior qualities over the commercial salts. . . Each fluid drachm represents fifteen grains of the combined chemically pure Bromides of Potassium, Sodium, Ammonium, Calcium and Lithium.

DOSE: ONE TO THREE TEASPOONFULS, ACCORDING TO THE AMOUNT OF BROMIDES REQUIRED.

# CHIONIA

From CHIONANTHUS VIRGINICA.

RE-ESTABLISHING portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.

Hepatic  
Stimulation.

Without  
Catharsis.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES A DAY.

FOR CLINICAL TRIAL WE WILL SEND FULL SIZE BOTTLE TO ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

PEACOCK CHEMICAL CO.  
ST. LOUIS, MO., U. S. A.

In CARDIAC and GENERAL MUSCULAR RELAXATION,  
due to Functional Cardiac and Circulatory Disturbances,

# CACTINA PILLETS

Has many Advantages over other Heart Stimulants.

IT HAS NO CUMULATIVE ACTION, AND  
IS ABSOLUTELY SAFE AND RELIABLE

EACH PILLET REPRESENTS ONE ONE-HUNDREDTH OF A GRAIN CACTINA, THE ACTIVE PROXIMATE PRINCIPLE OF CEREUS GRANDIFLORA

DOSE: ONE TO FOUR PILLETS THREE TIMES A DAY.

SAMPLES MAILED TO PHYSICIANS ONLY.

The CHIEF Characteristics of the Physiological Action of

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is to promote Normal Digestion by encouraging the flow of Digestive Fluids.  
It is the Modern and Most Successful Treatment for  
**INDIGESTION.**

A PALATABLE PREPARATION OF PANAX SCHINSENG  
IN AN AROMATIC ESSENCE.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES  
A DAY.

A FULL SIZE BOTTLE, FOR TRIAL, TO PHYSICIANS WHO WILL PAY EXPRESS CHARGES.

SULTAN DRUG CO., St. Louis, Mo., U. S. A.

"CHRISTIAN SCIENCE" IN GERMANY.—The German Emperor is stated to have no intention of allowing the mischievous and crack-brained disciples of Mrs. Eddy to have an opportunity of spreading their doctrines in the Fatherland. It will be interesting to see what steps the German authorities will be able to take in the matter, for while it is the duty of a Government to watch over the health of the people it cannot possibly be the province of any Government to decide what is and what is not correct medical treatment. It may be said that such a manifest absurdity as the theory of a Christian Science cannot possibly pretend to be a system of therapeutics; but, unfortunately, that is just what it does pretend to be. The German Empire will earn the gratitude of English and American legislatures if he can devise a plan which will stop these silly persons from playing with the lives of their fellow-creatures and which will at the same time give no chance to refractory persons to say that the freedom of the individuals is being unduly curtailed.—*The Lancet*.

The Tri Iodides Henry, is a very successful combination indicated in all rheumatic disorders. The efficiency of the Iodides is well known in blood taints and they are also the most useful in rheumatoid pains of tertiary syphilis, etc.

Tri Iodides Henry, is an alkaline combination of colchicin, phytolaccin, sodium salicylate and hydriodic acid, and is specially indicated as an alternative, in syphilitic, rheumatism, lymphatic and visceral disturbances. It is a powerful uric acid solvent and a reliable eliminant in diathetic diseases, and is synergistic of the salicylates and iodides. It is a very safe iodine alternative indicated where the iodides cannot be tolerated.

HIS UNCERTAINTY.—Farmer Honk. Say Lem!

Farmer Stackrider. Har?

Farmer Honk. Is that 'ere solemn, spectacled young nephew of your'n that's bein' called "Doctor," and goes aroun' lookin' as wise as a treeful of owls, a dentist, a hoss-physician, a corn curer, a layer-on-of-hands, a presidin' elder, or just a common doctor that saws bones and kills folks?—*Puck*.

RICHES RESIGN TO THE INEVITABLE.—Charles Broadway Rouse, the millionaire merchant and philanthropist, who is suffering from blindness due to optic nerve atrophy and who some time since announced that he would give \$1,000,000 to anyone who would restore his sight, has now withdrawn that

offer and resigned himself to the inevitable. Ever since the announcement was made he has been besieged by all sorts of quacks and "healers," and during the greater portion of the time he has paid a substitute who was affected in the same manner a regular salary for submitting to experiments and various forms of treatment.—*Boston Medical and Surgical Journal*.

It gives me great pleasure to state that my experience with Cactina pillets has been most satisfactory in cases of rapid, irregular heart action. I find their use most successful in controlling and relieving the cardiac pains accompanying this condition.

JAMES H. CARR, M. D.

Buffalo, N. Y.

ACOLOGISMS.—The physician whose specialty is obesity lives off the fat of the land.

Three-fourths of the doctors are over-worked charity organizations.

The physician who prescribes without any definite object usually attains it.—*The Acologist*.

DISPOSING OF THE KIDNEY THROUGH LIGATING THE URETER.—In abdominal and pelvic operations the ureter is often severed by mistake, or through necessity. This is especially the case in carcinoma of the uterus and other pelvic organs. Where possible, a plastic operation should be done, transplanting the end of the ureter into the bladder. Sometimes, however, such large sections of the ureter are removed with the tumor mass that transplantation is rendered impossible. The author reports such a case, in which he ligated the end of the ureter, with a view of performing a nephrectomy later, viz., after the patient had gained strength and recovered from the shock of the operation. To his surprise, however, further interference was not indicated. For a short time after the operation the patient complained of headache, etc., and the quantity of urine was diminished. Shortly all of these symptoms disappeared, and the patient made an uneventful recovery. The other kidney carried on the function properly, and the excluded kidney ceased to functionate. Hydronephrosis did not occur; at any rate it was not evident. There are several such cases recorded in the literature, with the same satisfactory results. The author recommends this procedure only where transplantation is not possible and nephrectomy contra-indicated.—*Landau, Deutsche Medical Wochenschrift; St. Louis Med. Rev.*

**A Product of the  
Highest Nutritive Value**

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**ARMOUR'S**  
**Extract of**  
**Red Bone Marrow**

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This preparation is rich in the elements that are necessary to the economy. Its administration increases the percentage of hemoglobin, causes the red corpuscles to multiply, enhances the oxygen carrying power of the blood and stimulates the appetite.

Physicians with cases of Anemia, Marasmus and other obstinate diseases, should try the Extract of Red Bone Marrow and note results.

One to four teaspoonfuls in cold plain or carbonated water, beer or with Nux Vomica, dilute Phosphoric Acid and Fowler's Solution.

**Armour & Company**  
**CHICAGO**

**THE VALUE OF SANMETTO IN SURGICAL OPERATIONS.**—It is with pleasure that I attest the merits of Sanmetto, and I think my experience with the drug justifies all the good things I can say of it. I have used it very extensively, and especially do I find it valuable in allaying inflammation in the prostatic urethra before surgical operations, and in keeping the urine bland and non-irritating after the operation is complete. It always has a soothing and sedative effect upon the kidneys, bladder and urethra. I shall continue its use in all forms of genito-urinary irritation.

THOMAS P. GRAHAM, M. D.  
Chicago, Ill.

**SUGGESTIONS WITHOUT HYPNOTISM AS A THERAPEUTIC AGENT.**—"Suggestions without hypnosis, in my judgment, plays a very important role in the treatment of disease, and imports into our therapeutic discussions a very uncertain element," says Dr. Harold N. Moyer, in *Medicine*. "Medical literature is replete with observations in which the influence of the mind upon the body and the so-called vegetative functions is set forth in a way that does not admit of denial. The question whether this force can be harnessed, and so directed as to be of value in therapeutics, is one that is still unsettled. The more, however, that it is studied, the more its value becomes apparent, and he who mixes his drugs with a large percentage of suggestion will secure the greater success in their application.

\* \* \* Hypnosis, on the contrary, has many objectional features. It is by no means easily induced excepting in those individuals with very unstable nervous systems, and in these it is quite certain that the effects are harmful. It is exactly in this class of cases that suggestion, without hypnosis, can be more efficiently employed, so I believe there is little necessity for inducing an hypnotic state. I do not pretend to say that it should never be done, but I do not believe it should be undertaken in a routine way, and I believe that it should be practiced by medical men alone."—*N. Y. Medical Times*.

**ANOTHER STRIKE IMMINENT.**—First Messenger-Boy: "How much do you earn a week, Chimmie?"

Second Messenger-Boy: "Oh, 'bout five hundred dollars—fer de company. I don't git but two-fifty out uv it meself, dough."

**THE EFFECT OF MODERN EDUCATION ON CHILDREN.**—The stress of modern education

has enormously taxed the brains of children by the multiplicity of studies. Children cannot assimilate the ideas in widely differing departments of knowledge at one and the same time. The effort to do so deranges in many instances the entire nervous system of the child. The so-called nervous child is not only not normal, but may be the victim of the education methods of the present day. The examination system is often a horror to such a child, as the writer knows from his own experience. The studies required of a growing child should never be allowed to disturb the health or interfere with proper rest and exercise. The modern city child seems to be unable to endure the burdens of civilized life as easily as did the children of the past, who were brought up in the country and spent the greater part of the time in the fresh open air. Whether our fathers were more hardy and robust as children than the progeny of the present generation may be an open question, but certainly the conditions of civilized life have so completely changed that at the present day mental and physical education possesses equal importance for the growing child. The mind of the child of today is too often developed at the expense of its vitality and health.—*Exchange*.

S. W. Bogan, M. D., 421 G St., Washington, D. C., says: "I tried all our stock remedies in my own case of Rheumatism without benefit. I have now taken three bottles of Uric Solvent and am well."

**HEARD IN THE BUTCHER SHOP.**—Butcher: "Come, John, be lively now. Break the bone in Mr. Williamson's chops, and put Mr. Smith's ribs in the basket for him."

John (briskly): "All right, sir; just as soon as I've sawed off Mr. Murphy's leg!"—*Tit-Bits*.

**Old Employees May Own Parke, Davis & Co. Stock.**

Big Detroit Concern Intends to Offer 4,000 Shares, to Give Its Tried Men a Share in the Profits—Growth of the Business.

DETROIT, Feb. 11.—The firm of Parke, Davis & Co., manufacturing pharmacists of this city, has adopted the policy of other large corporations of encouraging its employees to become shareholders. This company proposes to issue 4,000 shares of its capital stock, and permit the oldest among its employees, especially those in important positions as managers, superintendents and foremen, to purchase this new stock at \$55

# This Concerns you, Doctor,

Just as much as your patient. Your ability to understand what medication your patient needs is an important part of your professional duty; but another and no less important, part of that duty is to know which is the best preparation of that medicament to prescribe. "Beef, Iron, Cinchona, and Brandy, in combination are of inestimable value in wasting and exhaustive diseases."

"Colden's Liquid Beef Tonic" (preparation No. 1), represents these substances in their most active and assimilable forms and constitutes a very superior Food, Tonic, and Stimulant, combined. Preparation No. 2 is supplied without Iron.

**The CHARLES N. CRITTENTON CO.**

*Sole Agents for the United States.*


**Laboratory: 115 and 117 Fulton St., New York.**

Samples sent free on application, to physicians.

THE ALKALINITY OF BLOOD SERUM

## GLYCO-THYMOLINE

(KRESS)



Birmingham Nasal Douche.

### A PURGATIVE *For Mucous Membrane*

INDICATED IN ALL CATARRHAL CONDITIONS, ESPECIALLY

## NASAL CATARRH

"Glyco-Thymoline (Kress) is well adapted for the treatment of catarrhal conditions of the mucous membranes. I have frequently employed it with benefit in nasal, buccal and bronchial affections. Direct local medication is of much advantage in these cases. In some instances we may safely depend on topical measures alone; in those where internal treatment is also necessary, Glyco-Thymoline (Kress) proves an excellent adjuvant."

MEDICAL BULLETIN, Phila., Pa., March, 1899.

**SPECIAL OFFER**

A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges. K & O Douche to physicians, 15 cts.; \$1.50 per doz. Retail 25 cts. Remit stamps.

**KRESS & OWEN COMPANY, Chemists, 221 Fulton Street, New York**

**HASTENS RESOLUTION AND FOSTERS CELL GROWTH**

a share. The present market value of the stock is \$70 a share, and face value, \$25 a share.

The company announces that it is not taking this action for philanthropic reasons, but because it considers it good business judgment to have its men in important positions interested in the profits of the business.

Parke, Davis & Co. are the largest manufacturers of pharmaceutical products in the world, and the development of business in the past few years has been something phenomenal. In addition to their home offices and laboratories at Detroit, they maintain five sales branches in this country, at New York, Chicago, Baltimore, New Orleans and Kansas City. They also have extensive manufacturing plants in Walkerville, Ont., and in London, England, with a supplementary foreign plant at Simia, India.

This is one of the institutions of which Detroit is very proud. From a small beginning in the early seventies the business has developed into world-wide proportions.—*N. Y. Commercial.*

**CARBOLIC ACID AS A GERMICIDE.**—Dr. Seneca D. Powell, Professor of Surgery in the New York Post-Graduate Medical School is a great believer in the efficacy of carbolic acid as a germicide. If he had had his hands in a very septic field, as in a pus case, and wants to operate upon a non-infected patient, he washes carefully and dries his hands; then pours an ounce or more of pure carbolic (i. e., the 95% solution), on his hands and washes with that seeing that it penetrates every crack and crevice and especially about and under the nails; and when the burning becomes unpleasant washes in alcohol, which completely neutralizes the acid and finishes the sterilizing of the hands though they are finally immersed in bichloride solution. He says that oft-repeated examinations of his hands have been made, and hundreds of cultures of bacteria attempted from his epithelium and scraping from beneath the nails, after such a process, and every one has shown the most absolute sterilization. So he does not hesitate to attempt the most delicate operation (such as trephining, abdominal section, etc.) after dealing with a septic case; and his clinical results have borne out the findings of the bacteriologist.—*Amer. Jour. Surg. and Gynecol.*

INDIANAPOLIS, IND., May 18, 1898.  
*Mr. John B. Daniel, Atlanta, Ga.*

DEAR SIR: I have tried *Passiflora* in my practice, and find it in every way satisfactory. The Concentrated Tincture *Passiflora*

is wonderful in its effect in insomnia and nervous prostration, and I also find it an excellent remedy in the opium and morphine habits. I shall continue to use it.

Yours very truly,

CHARLES L. AINSWORTH.

Dr. Minot J. Savage in a recent sermon said: "There is in New York that which calls itself par excellence society. A society that is organized around the idea of wealth alone must of necessity be ignoble and vulgar. I was at the opera the other night, and I saw one woman who illustrates what this sort of thing comes to when it degenerates. I have not seen anything outside a show at Tiffany's that in any way suggested this woman. It was barbaric. She had the air of telling everybody that she had not come there to hear the music, but merely to be looked at, and she was loaded and hung all over with diamonds and gems and jewels of every kind. The type of society whose distinguishing feature is that kind of thing certainly is not human."

Fairchild's Essence of Pepsine never fails to give satisfaction to the prescriber, the dispenser and the patient. Panopepton is a perfect food—the most agreeable and nourishing of all foods for the sick. Peptogenic Milk Powder makes cows' milk practically identical with mothers' milk, and thus affords a suitable and adequate artificial food for the nursing infant.

**GOOD FOR THE DAUGHTERS.**—A Washington shopkeeper, apropos of present and coming conventions, has in his show window this placard.

D. A. R. TERS  
SHOULD WEAR OUR  
G. A. R. TERS.

"For \$50 and study evenings for a few weeks," a circular before us says, one can acquire an honorable and lucrative profession." The profession is that of osteopathy, and "a mail course," regardless of education and capacity, is to yield 500% on the investment. All the alluring arts of the "get rich quick" circularizer are used to inveigle the poor dupes to purchase the mail course.

"With the knowledge thus gained, a lucrative living is assured, for the demand for treatment by osteopathy is out of all proportion to the number of graduates in this new and wonderful science. Every osteo-

THE SELECTIVE INFLUENCE OF

**GRAY'S** Glycerine **TONIC** Comp.

upon the respiratory tract is indisputable. It allays the cough and respiratory distress of bronchitis, winter cough, pneumonia and influenza. It invigorates the whole system too.

THE PURDUE FREDERICK CO.,

No. 15 Murray Street, New York.

**PERPLEXITIES**  
*in the Treatment of Diseases of Women*

are readily overcome by the use of  
**MICAJAH'S**  
*Medicated Uterine*  
**WAFERS**

Their ANTISEPTIC, ASTRINGENT and ALTERATIVE action renders them of especial service in congestions and inflammations of the mucous membranes of the Genito-Urinary tract.

Sig: Insert wafer into the vaginal canal, up to the Uterus, every third night, preceded by copious injections of HOT water.  
 LIBERAL SAMPLES AND BOOKLET: HINTS ON THE TREATMENT OF DISEASES OF WOMEN - SENT GRATIS BY MAIL.

**MICAJAH & CO. WARREN PA**

ESPECIALLY INDICATED  
 IN  
 Gonorrhea  
 Vaginitis  
 Vulvitis  
 Leucorrhoea  
 Endometritis  
 Granular-Os  
 Urethritis  
 Cytitis  
 Uterine  
 Displacement  
 &c. &c



pathic physician in the country is making money and has more patients than he can handle. If you are not satisfied with your present position or occupation, could you turn to any more promising way of making a lucrative, honorable and independent living? You need not be a slave to any man a moment longer. If you desire to rise above your present condition, you can do so. We hold the key. We have given it to others and can give it to you. A small outlay and, a little honest study in the evenings for a few weeks will enable you to be your own master. There is no better paying profession on the face of the globe today than osteopathy. Four patients a month will yield you \$100 per month, and these patients can be treated in your own home in a few minutes in the evenings—thus enabling you to continue your present occupation until you have worked up a large practice and people demand your services throughout the hours of the day."

And yet this "school" is "incorporated under the laws, etc.," and the obtaining money under false pretenses is a crime!—*American Medicine.*

Pepto-Mangan (Gude) acted extremely well in all cases in which it was employed. In the case of my patient, who has suffered for a long time with neurasthenia in consequence of anæmia, a prompt and visible improvement always ensued. I will continue to recommend and employ Pepto-Mangan in the future in appropriate cases.

DR. FRITZ THELEMANN,  
*Surgeon-General.*

#### Voluntary Commitment Law.

Chapter 230, Section 3690, General Statutes of Connecticut, reads as follows:

"The managers, trustees or directors of any inebriate asylum established by the laws of this state may receive any inebriate or dipsomaniac who shall apply and be received into such an asylum, retain him one year and treat and restrain him in the same manner as if committed by the Probate Court."

#### Laryngeal Papilloma.

Francis J. Quinlan of New York, Professor of Laryngology and Rhinology in the New York Polyclinic, advises (*Laryngoscope*, March, 1901) the submucous injection of Suprarenal Liquid with Chloretone, which, he says, acts as an anesthetic astringent upon the part and causes many of the small growths (papillomata) to disappear.

#### Smallpox Therapy.

The prevalence of a mild type of smallpox throughout the country gives the therapy of that disease especial interest at the present time. Vaccination is, of course, unquestionably not to be overlooked as a preventive measure, but in addition infection may be made much more unlikely and, where infection has taken place, the course of the disease considerably shortened and shorn of its terrors by the administration of the valuable anti-purulent ecthol. The Battle Company has just issued a pamphlet dealing with the use of ecthol in this disease. The pamphlet should be in the hands of every physician who may be called upon to treat smallpox. It will be sent to any physician who makes the request.—*Medical Fortnightly.*

#### One on the Nostrum Peddler.

One of those persistent medicine fakes, who travel all over Maine, doing their best among their rural customers to keep the population full of drugs, recently drove into the yard of a farmer up in Androsnobsco County and tried for a long time to induce the woman who came to the door to invest in some of his various trash. As a "clincher" he said:

"Madam, it is absolutely plain to see that you suffer from nasal catarrh of the nose. Now let me sell you a box of this unfailing catarrh and lice salve. I warrant and guarantee it absolutely to cure catarrh, blind and seeing piles, appendi—"

"Naw, it's no use," broke in the woman. "I don't take no stock in such stuff. I know very well that your pew-fangled nostrils you cart round won't cure nothing!"

MY DEAR MRS. DORN:

I beg to thank you for calling my attention to the vaccine made by Parke, Davis & Co., which has thus far given me perfect satisfaction.

Since abandoning the use of certain other preparations which were very often followed by disagreeable complications, I have failed to observe *one case in which any bad results followed the use of this preparation.* I find, however, that the period of incubation is considerably longer, but is followed by a *perfectly healthy sore*, and can commend the virus in the highest terms.

Sincerely yours,

(Signed) G. H. HOWELL, M. D.,  
117 West 93d St., New York.

To Mrs. Josephine Dorn, Pharmacist, 93d St. and Columbus Ave., New York.

**Preparation—Par Excellence**

**“Fellows’**

**Syrup of Hypophosphites”**

CONTAINS

**Hypophosphites of**

**Iron,**

**Lime,**

**Quinine,**

**Manganese,**

**Strychnine,**

**Potash.**

Each fluid drachm contains Hypophosphite of Strychnine equal to 1-64th grain of pure Strychnine.

**Offers Special Advantages**

**in Anaemia, Bronchitis, Phthisis, Influenza, Neurasthenia,  
and during Convalescence after exhausting diseases.**

Dr. Milner Fothergill wrote: “It (Fellows’ Hypophosphites) is a good all-round tonic, specially indicated where there is **NERVOUS EXHAUSTION.**”

**SPECIAL NOTE.**—Fellows’ Hypophosphites is *Never sold in Bulk*, and is advertised only to the Medical Profession. Physicians are cautioned against worthless substitutes.

Medical letters may be addressed to

**MR. FELLOWS, 26 Christopher St., New York.**

**LITERATURE OF VALUE UPON APPLICATION.**

**Sciatic Pain—Prompt Relief.**

In reporting his experience in the treatment of sciatica, Fred. E. Davis, M. D., of Brookside, Ala., writes as follows in *Annals of Gynecology*: "I have been giving antikamnia and heroin tablets a thorough trial in the treatment of sciatica, and I must say that my success has been phenomenal indeed. I have also induced two other physicians to give them a trial, and their success equals or surpasses my own. I meet with many cases of sciatica and until antikamnia and heroin tablets were introduced I was compelled to use a great deal of opium and morphine to relieve the pain. Since then, though, I have not given either. One of my patients had been confined to bed for three weeks during her last attack of sciatica. I prescribed one antikamnia and heroin tablet every four hours, and in forty-eight hours she was up and about and has not felt the pain since. I thank you for the introduction of this most excellent remedy, and assure you of my willingness to report the results of still further investigation."

An eastern editor says that a man in New York got himself in trouble by marrying two wives. A western editor replies by assuring his contemporary that a good many men in that section had done the same thing by marrying one. A northern editor reports that quite a number of his acquaintances found trouble enough by promising to marry, without going any further. A southern editor says a friend of his was bothered enough when simply found in company with another man's wife. —*Exchange.*

Acute Metritis, resulting many times from exposure to cold during menstruation or from gonorrheal infection, usually manifests itself by a chill, more or less severe, with pains in lumbar or hypogastric region.

The most satisfactory treatment for this condition is rest in bed with an ice coil or bag on the abdomen over the uterus, followed by thorough flushing of the vagina with hot water in which has been dissolved Micajah's Medicated Uterine Wafers (one to the quart). After the acute stage has subsided a Micajah Wafer inserted into the vaginal canal up to the cervix will exert the antiseptic astringent action so essential in these cases.

The opinion recently handed down in the U. S. C. Court of Appeals shows that the Phenacetin Patent has been sustained by the Court of last resort, from which there is no appeal.

Druggists who have refrained from dealing in infringing phenacetin will be gratified because exempt from the consequences to which infringers are liable under this decision.

**Removal Notice.**

Owing to the increasing demand for the Kinraide Coil, we are forced to use the entire space at No. 79 Franklin street for manufacturing purposes, and removed the office and salesroom to the third floor of the Continental Building, No. 18 Boylston street and 657 Washington street, Feb. 15. Swett & Lewis Company, X-Ray Apparatus, Boston, Mass.

Fellows' Hypophosphites has stood the test of both time and experience because it long ago demonstrated its real value. Few remedies are so well known to physicians, and yet no unethical method of notoriety has ever been employed in its advertising. It is a remedy that advertises itself, for results follow its use.

Victor Koechl & Co., have introduced to American physicians many new remedies which have won the confidence of the profession. Therefore, their Albargin, advertised in this number is worthy of a trial, both because it possesses advantages over other germicides, and because its value has already been established by actual experience.

John Wyeth & Brother is a firm which has established a large business upon skill, honesty and American enterprise, for this reason the medical profession all over the world have given them the very best recommendation—a large and continued patronage.

"The poor are facing a crisis which may alter their mode of life and force them to adopt substitutes for such vegetables as cabbage and beans," says Ethelbert Stewart of Chicago, secretary of the Economical Food Bureau. That proposition may go in Chicago, but times will be harder than they are now before a Bostonian of any rank will give up eating beans. Never!—*The Boston Herald.*

SOME ADVANTAGES.—"I presume you appreciate the advantages you derive from being assimilated by a civilized country," said the interviewer to the Sultan of Bazzoo Island.

"Yes, indeed," assented his majesty. "Why, I got a thousand dollars damages because of injuries sustained by swallowing the false teeth of the last missionary we put in the royal consomme."—*Baltimore American.*

# Journal of Medicine and Science.

ISSUED ON THE TENTH OF EACH MONTH.

In the Interests of Public Health, and in order that the People of Maine may reap the great Benefits, both hygienic and economic, assured by a judicious Application of the Principles of Preventive Medicine, this Journal supports the following Propositions and urges Physicians and Laymen to work diligently to further their Consummation.

- 1st. The Establishment of a Sanatorium for the Treatment of the Consumptive Poor.
- 2nd. The Abolishment of the Coroner System and the Appointment of Medical Examiners.
- 3rd. The daily Inspection of School Children by School Physicians.
- 4th. The more liberal Endowment of our Medical Schools by private Charity, and the voting of larger Appropriations to our State and Local Boards of Health.
- 5th. The Establishment of a State Bacteriologic Laboratory.

For, surely, health is the prime essential to success in life, and the health of the people is the foundation upon which all their happiness and all their power depends.

Vol. VIII.

PORTLAND, MAINE, APRIL, 1902.

No. 5.

## Original Articles.

### \* The Conduct of Normal Labor.

By WILLINGTON JOHNSON, M. D., of Augusta.

**W**HEN asked by the chairman of your committee to write a paper for this meeting, the first thing of which I thought was, had I better comply with the kind request—and the second thought was, what will be of the greatest benefit to the greatest number? Hence instead of choosing for my subject "The Mechanism of Labor," or "Dystocia," or something about which the average obstetrician sees only a few cases in a life time, I choose a subject upon which to write, that is common to all, and of the utmost importance to all who intend to do obstetrical work. While the older members of the profession may be thoroughly versed and "up to date" in this work, it is hoped by the writer that they may bear with him a few minutes for the sake of those who are coming into the field of action, as he attempts to give a few practical suggestions.

One hard point to decide is, what is and what is not normal labor? In this paper I shall consider all cases normal cases that do not fall into the category of extreme or rare cases. Having been called to attend a

case of labor, there are several questions that may be properly asked—as regards to pain, character of, when began, location, time between, etc., condition of bowels, frequency of urination, and if you have not seen the patient previous to this visit, which is often the case, question as to general condition for the preceding days, weeks, and even months, and during this catechism, one by careful observation may note the condition of patient better than by questions. Notice the position taken. If not in bed, note the expression of the face, the movements of the body, observe whether the feet, hands, eyelids and other parts of the body are swollen.

All these things being done, it may be time to proceed to business, to make a digital and bimanual examination at least; but before doing this the hands must be carefully disinfected. I want to emphasize the fact that, from start to finish, surgical cleanliness ought to be religiously practiced; for, taking into account statistics of the past, and I am sorry to be obliged to say it, even at this late date, there are many cases lost by child-bed or puerperal fever. In getting family history while making examinations for life insurance, one is appalled to see how many lives of young and useful women have been sacrificed, needlessly in most cases by the lack of antisepsis. This branch of obstetrical work was unknown and consequently unpracticed previous to 1847, A. D. Thanks

\* Paper read at the Fifty-first Stated Meeting of the Maine Academy of Medicine and Science, held March 10, 1902.

to a medical student, who was observing, many valuable lives have been saved since that date, due to his notes and observations. All know now the need of cleanliness in surgical work, and in my mind one who attends an obstetrical case without strict precautions antiseptically is as culpably negligent of his duty, as though he did a celiotomy regardless of cleanliness. I need not enlarge upon what we may use to carry out the above mentioned principles, for to every *intelligent* practitioner, antiseptics are to him a daily routine, and he knows the best germ killers, from boiling water to the chemicals such as carbolic acid, bichloride of mercury, alcohol, and many others.

The foregoing being accomplished and the nurse having prepared the bed properly, and bathed the genitals and surrounding parts of the patient with an antiseptic solution, we proceed to ascertain the condition of the patient by digital examination, the hand being warm and finger lubricated with carbolized vaseline, etc. As the finger enters the vagina, note whether the parts are dry or moist, the rigidity of the tissues, whether the pelvis is roomy or otherwise, and, as the finger passes on, whether the cervix is dilated or dilatable, whether the membranes are intact or ruptured. Next note the presentation, and probably before this is all done there will be pain, and then note whether the presenting part advances during pain, the strength of uterine contraction, etc. It takes less time to do all this than to tell it, but experience counts in the rapidity with which any work may be successfully conducted.

A word in regard to the preparation of the bed may not be amiss, as we do not always have a trained nurse at hand. The bed should be carefully made, then covered with a rubber sheet, over which place a draw-sheet, both being smooth and fastened to opposite sides of the bed, then some light covering for patient.

After having made an examination one can usually tell whether the patient will need his services immediately or whether he may leave her for a time.

In the beginning of labor the patient has many aggravating or false pains, the true labor pains coming on when the child is well down in the pelvis. True labor pains are also called bearing down pains because the patient strains and brings the diaphragm and abdominal muscles into action to aid the uterus in expelling the child. One may listen with a stethoscope for fetal heart sounds to ascertain whether the child is alive, if there are no movements by which we may know.

Labor is properly divided into three stages.

During the first stage the patient ought not as a rule to be confined to the bed until dilatation is well advanced. The pains are promoted by the patient moving about the room or sitting on the edge of a chair, a change of position being beneficial. The clothing should be loose and limited to a wrapper and underclothing. If the first stage is slow, make a careful vaginal examination to ascertain the cause. Do not leave the patient until certain she is all right and that labor may be prolonged. It is better taste on the part of the physician not to remain in the room during this stage. In the second stage so long as everything is progressing well, the duties of the obstetrician are few and simple. After dilatation is well advanced the patient should not leave the bed. The clothing should be well tucked up under the arms, to prevent soiling. A folded sheet pinned around the body will further aid in cleanliness. The uterine expulsive efforts should be reinforced by the voluntary muscles. Direct the patient to hold the breath and bear down with the pains. Most women during expulsive pains instinctively brace their feet and catch the hands of the nearest bystander, to assist the straining effort by pulling. To a certain extent this should be encouraged. Pressure may also be made over the abdomen and back to relieve the patient in her distress and to keep her steady for labor pains. When the bag of membranes does not rupture spontaneously by the time it reaches the pelvic floor, the obstetrician should rupture it, which may be done with a sharp finger nail, or any blunt instrument. As a rule her position should be left to the choice of the patient, sitting on the edge of bed or chair, and if lying down a change will aid in the propelling force. The most convenient position for all concerned is the left decubitus, or the patient may lie on her back. In either position the legs should be flexed upon the abdomen. The head should be drawn down upon the chest.

When the child's head reaches the pelvic floor the perineum should be guarded by the obstetrician, and if possible any injury to it prevented. If the pains are severe and the pelvic floor rigid, it is right to hold the head back and give the soft parts time to relax. The rate of descent is at the command of the obstetrician. At this stage the action of the abdominal muscles may be involuntary and not under the control of the patient. An anæsthetic aids in the control of the expulsive forces, and may prevent laceration. The head must be well up under the pubic arch, and only allowed to pass, in the intermission of pains. From the time the presenting part reaches the pelvic floor great care and watch-

fulness should be observed, no hesitation being had in exposing the parts if it makes any difference to the welfare of the patient. It will take from fifteen minutes to an hour for the head to be born after it presents itself at the floor of the pelvis.

The moment the head is born the index finger should at once be inserted into the vagina to see if the cord is around the neck, and if so, it must be drawn down fold by fold and slipped over baby's head. If this can not be done, tie in two places and cut. In delivering the trunk, let one shoulder pass at a time, taking the one in advance, usually the lower one. There is no hurry about ligating the cord; in fact it is better to wait a few minutes unless something abnormal presents itself; but owing to certain conditions of mother it may be necessary to tie the cord immediately. The best rule to go by is to tie the cord as soon as pulsation has ceased and respiration is established. In case of twins the cord should be ligated in two places, in fact, it is the safest thing to do in every case, and then we may not fear hemorrhage from the cord. A suitable material for ligating is narrow linen bobbin, or twisted silk, and they must be surgically clean. It is best to leave one or two inches from the navel, tying the cord one-half inch from the cutaneous line. Pinch the cord before tying. After tying, hold the cord in the hand and cut between ligatures with a pair of clean scissors, and wrap the stump in absorbent cotton, linen, or a starch dressing.

*Third Stage:*—Much depends upon the skilful management of this stage, as regards the immediate safety and recovery of the patient. Hemorrhage may be mentioned as one of the dangers, hence the uterus should be made to retract and contract until it is hard and firm on pressure. It should be guarded by the hand as soon as the head is born and pressure made upon it, with a kneading if the placenta does not come away in a few minutes, at the same time making a gentle traction on the cord. If the placenta will not come away, seize the fundus of the uterus through the abdominal walls and holding it firmly in the left hand pass the finger of the right hand in behind the placenta and force it out into the vagina, withdrawing the hand with it, gathering it up and giving it a twisting motion as it leaves the vagina. Examine the placenta and membranes carefully to see if complete. Be sure the uterus is well contracted before leaving your patient. Ergot may be given. After the child is delivered and cared for, and the placenta removed, the mother should be carefully

washed with some antiseptic solution, bichloride, 1 to 1,000, being preferable, and if hand or instruments have been introduced into vagina or uterus, wash out either of them with the same kind of a solution. As soon as the washing is completed apply pads, if patient has them, or napkins wet with alcohol, to the pudenda. Before doing this the soft parts should be carefully examined to ascertain whether there is any laceration of them. If no tears are found apply the abdominal binder or swathe, being careful to have it well down over the hips and no wrinkles in it.

Sometimes mothers do not want to nurse the baby, or for certain reasons can not. It is well to apply a bandage to the breasts for comfort, and also to hinder the milk coming in so great abundance. Some soft firm cloth is selected and pinned tightly around the part of the body from the armpits to the lower border of the seventh or eighth ribs. This should be re-applied daily and breasts bathed in camphorated oil. Emergencies may arise, such as eclampsia and post-partum hemorrhage. In cases of the latter large doses of ergot or ergotine should be given, the foot of the bed raised, and the uterus seized in both hands, brisk kneading being done all the time. If these methods do not check hemorrhage, wet a soft cloth or handkerchief with table vinegar, and with left hand on abdominal wall to steady the uterus, pass the wet cloth with right hand into, and mop out said uterus with the cloth wet with vinegar; or the abdomen may be slapped violently with a wet towel, pieces of ice inserted into the uterus, and alcohol applied to the abdomen. All lacerated cases should be treated surgically. Repair at once, using in most cases catgut sutures. Enough might be said on this subject to fill a paper, hence I will say that repair being made, the patient should be catheterized until parts are healed.

Just a word in regard to the care of the new-born baby. As soon as possible after the head comes into the world wipe its face, clear its mouth and throat of mucus, and wipe the eyelids carefully as a preventive of ophthalmia. Usually respiration takes place as soon as the child is born, but if it does not, means must be taken to aid it, such as blowing in face, dashing cold water on the chest, inserting the body alternately in cold and then warm water, slapping the buttocks gently with hand or wet towel, compressing the chest walls at regular intervals with the fingers, or taking the infant by the heels with one hand, and the other placed under the back of neck and shoulders, shift ends of it regularly, holding it in each position a few

seconds at a time. Continue these methods until respiration is fully established. Thirty minutes are none too long a time to try before giving up. Wrap the baby in some warm material as soon as born to prevent chill. We must remember that a great change has come to the baby, being removed from a warm place, to oftentimes a cold atmosphere, even as cold as the world can be, must be a shock to its little body. Cover the head while wet, as well as the body. Look for marks, deformities, and other abnormalities.

**Bathing:**—While some cling to the old method of washing the baby, my choice is to have the child oiled carefully with warm sweet oil, vaseline, or lard, beginning at the face and head, wiping off with a soft cloth until clean, care being taken to remove all foreign substances from folds of the skin in neck, groin, and limbs. Later bathe child every day, or in winter every other day. Bathe parts of body that get soiled as often as needed. As a rule I do not recommend infant powders, but if the skin becomes irritated, dust on pulverized starch, or zinc powder. It is well after a few weeks to have the nurse rub with bare hand.

**Infant's Clothing:**—How many physicians could tell what is necessary to properly clothe an infant, if asked by some young woman who expects to be mother in the near future? Of course I refer here to *young* physicians, the older ones know all about it. Briefly the clothing should be adapted to climate, loosely worn, so as to give freedom to body and limbs. The clothing consists of a belly-band, to be used until the navel is healed, undershirt, and two dresses, with flannel wrap outside, if cold weather. The undershirt should be made of soft flannel, without sleeves and opening in front. Next is a flannel dress with high neck and long sleeves, opening in front, the length twenty-five inches. The feet and legs should be protected with woolen socks, reaching to the knees. The under-skirt and dresses may be fastened with tapes, thus doing away with pins. Change clothing daily.

**Nourishment:**—For the mother should be, for the first few days, liquid, and later toast, tea, beef-steak, and any reasonable diet. Childbirth is not a pathological seance, but a physiological function, unless made otherwise, and I see no reason for the starving act to be enforced. The baby should be put to the breast in six or eight hours after birth, and applied to both breasts at same nursing. Regularity being essential to good digestion, the baby ought to nurse at regular intervals of two hours, and if fussy between whiles,

give it a little sterile water, or sterile water with cow's milk in it, two parts water and one milk, giving every two or three hours. If bottle fed give about two ounces at a time, increasing in quantity as the child grows older.

**Articles for Handy Use:**—Hot and cold water, fountain syringe, hot water bottle, scissors, sterile sheets and towels, soft rubber catheter, drinking-cup, bed-pan, rubber sheets, antiseptic pads, and solutions, plenty of light and pure air, safety pins. These, together with a good nurse and obstetrician, and with some good aseptic lubricant mixed with the oil of patience and intelligent manipulation and care, will result in much being accomplished in confinement cases.

### \*Ectopic Pregnancy.

By HERBERT F. TWITCHELL, M. D., of Portland.

**T**HIS is the name given to that pathological condition, the development of the fecundated ovum outside of the uterine cavity. Ovarian pregnancy, in certain fishes like the shark, and tubal pregnancy, in certain mammals like the cat, is the normal process; but in the human female, pregnancy occurring outside the uterus is one of the most unfortunate accidents that mortal woman is heir to.

One need only study the history of ectopic pregnancy to be convinced that there is nothing which may not occasionally happen to a human being without actually terminating existence. Ectopic pregnancy is fortunately very rare. Bandl, of Vienna, reported but three cases in sixty thousand pregnancies. Another Vienna report gives five cases in sixty thousand. Winckel saw sixteen cases in twenty-two thousand. Fasola observed four cases in fifteen hundred and sixty-five pregnancies. I question whether all these physicians did not see some women die from ectopic pregnancy without ever having an opportunity to make a correct diagnosis, for a percentage of less than three in ten thousand obstetric cases is certainly very small.

Some authors have stated the frequency as one case in every five hundred pregnancies. I am satisfied that this estimate is too high, for that would mean thirty cases of ectopic pregnancy in our State yearly; and while it may be that half of the cases which occur are never recognized, yet I am quite sure that as many as fifteen cases have never been recognized in any one year. I consider my own experience exceptional, in having seen

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six cases—two in the Maine General Hospital clinic—this year, and I doubt if as many more have been seen in the State. Therefore I estimate that one case in every fifteen hundred pregnancies would be approximately correct for our commonwealth.

Formad, of Philadelphia, in a series of thirty-five hundred general autopsies, found thirty-five ectopic gestations, which shows simply that it is a very fatal disease when not treated surgically.

In the care of four hundred and fifty pregnancies I have not found a case. I have seen five cases in the clinic at the Maine General Hospital, and have had five cases referred to me by other physicians for operation or consultation, which I report in closing this paper.

In the middle of the eleventh century, Albucasis described the first known case of ectopic pregnancy. For centuries it was considered one of the rarest of nature's accidents. The first recorded operation, the opening of a gestation sack which had become adherent to the abdominal wall, was in 1540. One of the best early papers upon the subject, was written by Velpeau in 1836.

Medical literature, prior to 1880, gives only sixteen cases operated upon before rupture and while the embryo *was still alive*. Nine of the patients died and six recovered. The great mortality in this group of cases was evidently due to inadequate control of hemorrhage. It had already been observed that after the death of the embryo the new blood-vessels quickly disappeared, and the mortality in operations performed after this event took place was comparatively low; therefore J. C. Skene, editor of the article in *Holmes' Surgery*, published in 1880, advised waiting till after the death of the child before operating, thus avoiding the chief danger, hemorrhage from the placental vessels.

In March, 1883, Lawson Tait performed his first successful operation for *ruptured ectopic pregnancy*, and his investigations and writings at once gave the profession new knowledge concerning so-called "pelvic hæmatocele," and since that time the literature of the subject has become voluminous.

Many varieties have been described; but all cases are originally either ovarian,—extremely rare, or interstitial,—somewhat more common, or tubal, which is by far the most common of all varieties. Some authorities deny the ovarian variety; but well authenticated cases have been reported, and I have seen one case operated upon by Dr. Thompson at the hospital for uterine suspension, where the right ovary contained a gestation

the size of an acorn, in which a tiny foetal structure could be seen. It is but fair to state also that some authorities claim a primary abdominal variety. Again, the placenta may be found in the tube and the embryo in the abdominal cavity or in the uterus, and vice versa.

#### CAUSES.

All observers agree that some pathological condition of the fallopian tube is the chief cause; either destruction or changes in the mucosa, or obstruction of its lumen by exudates, adhesions, or convolutions; or sacculations, inherited or acquired, into which the ovum may drop and become implanted.

This theory is supported by the fact that ectopic pregnancy almost always occurs in women who have suffered from puerperal or gonorrhœal salpingitis; or from other pelvic inflammations which have interfered with the lumen of the tube.

It is generally conceded that the ovum normally becomes fecundated at or near the ovary, and anything which interferes with its passing into the uterus within a few days thereafter may be considered a cause of ectopic pregnancy.

#### SYMPTOMS.

The early signs of ectopic pregnancy may be considered in three cardinal groups: general symptoms of pregnancy, pelvic pains, and a rapidly-growing tumor outside of the uterine cavity.

The general signs of pregnancy are less well marked than in uterine pregnancy. Amenorrhœa is not usually complete; the patient usually has some "show" about six or seven weeks after a normal menstruation. The false decidua forming in the uterus predisposes to uterine hemorrhage, while the traumatic stretching of the tube by the growing foetal structures furnishes the exciting cause. A menstruation abnormal in time or amount should always suggest the possibility of ectopic pregnancy. When the tube actually ruptures, some vaginal flowing nearly always results and is attended by the shedding of decidual membrane, either as a cast or in shreds. Under the microscope this will show decidual cells, but no chorionic villi. The patient, and perhaps the attendant, will consider it a miscarriage.

Nausea, enlargement of the breasts, discoloration of the areolæ and vaginal mucosa may, or may not be present.

*Pelvic pains.*—Some pelvic discomfort usually begins very early and increases as the gestation advances. In a few weeks re-

curring, colicky pains may begin, situated low in the pelvis, and probably due to spasms of the tube. These pains do not occur in every case.

The pains attending rupture are sudden and agonizing in character, and attended by a degree of fainting, commensurate with the loss of blood.

*Tumor.*—If an examination be made after the fifth week of the pregnancy, it will be possible in most cases to discover a small, very tender tumor at one side or behind the uterus. If repeated examinations are made, the tumor will be found to grow more rapidly than anything else in this situation, excepting a tumor the result of acute suppuration.

The uterus will be enlarged, softer than normal, its os more patulous, and there is an unusual amount of mucous vaginal discharge.

The vast majority of cases rupture between the fifth and seventh week, and then we have added to the above the symptoms of abdominal hemorrhage. This is the time when the physician is perhaps first called to the case.

When the surgeon is called, he usually finds a patient with a history and condition somewhat as follows: Generally a history of former pregnancies, with an interval of sterility and a history of some pelvic disease. Menstruation abnormal the last one or two periods, some general symptoms of pregnancy, some unusual pelvic trouble for three or four weeks, recent, sudden, very severe tearing pains, with fainting. The patient shows a degree of pallor, has feeble, rapid pulse, or perhaps is pulseless at the wrist, looks anxious, has a feeble voice, is restless, temperature subnormal, abdomen somewhat distended and tender. Pelvic examination may be negative, except for soft and patulous cervix; but usually the ill-defined hæmatocele is to be made out. If the rupture has taken place into the broad ligament the hæmatoma is easily felt. The blood clot, whether it be hæmatoma or hæmatocele, may cause obstruction of the bowels.

Obstinate vomiting is often present.

These are the symptoms of primary rupture in the early weeks of the gestation. If the mother and embryo survive the first rupture, there will usually be recurring hemorrhages at irregular intervals until the mother or embryo succumb; or, if the embryo has escaped, leaving a favorable attachment for the placenta, the pregnancy may proceed to term.

If the rupture occurs before the seventh week, causing death of the embryo, and the hemorrhage has not been too severe, spontaneous recovery may result; but this is a very

rare, as it is a very fortunate, occurrence. If the rupture takes place later than the seventh week, constitutional symptoms will later arise.

In any case sepsis, abscesses, fistulæ, peritonitis and death, or a tedious convalescence, with only partial recovery, is almost sure to result unless the debris is promptly removed by the surgeon.

If, as sometimes happens, the pregnancy advances beyond the fourth month, the tumor is easily demonstrable, and there are added the foetal signs—heart beat and placental souffle. And if such a tumor can be differentiated from the uterus, the diagnosis is made. The tumor is tender, gives a sense of fluctuation, and is vascular, so that pulsating vessels are often felt. It is to be borne in mind, however, that this latter condition often exists with cancer and fibroma. If the tumor is subperitoneal, the fornix on that side is partially or wholly obliterated.

#### DIAGNOSIS.

*From normal pregnancy.*—In normal pregnancy there is complete amenorrhœa, while in ectopic pregnancy the history is one of disturbed, abnormal, somewhat diminished menstruation. It is necessary to exact very definite statements from the patient regarding menstruation, for a very slight variation from the normal, taken in conjunction with other symptoms, is significant. In normal pregnancy there are no signs of inflammatory action, or of tumor in the pelvis, while in ectopic pregnancy there are such signs.

*From hydrosalpinx.*—In hydrosalpinx there are no general signs of pregnancy, the uterus is not soft, the tumor grows much more slowly than that of ectopic pregnancy. It is also less tender to the touch, less boggy, and less vascular.

*From pyosalpinx.*—In pyosalpinx there are no general symptoms of pregnancy and softening of the uterus; there is more constitutional disturbance, more inflammatory action and fixing of the adjacent structures by adhesions and exudate, and there is a different previous history of causation.

*From ovarian and fibroid tumors.*—These tumors are not attended by general symptoms of pregnancy, the uterus is not softened, they are of very slow growth, are not tender to the touch, do not usually cause much pain or inflammatory action, and tend rather to increase than to diminish menstruation.

*From malignant disease.*—Cancer is not attended by the general symptoms of pregnancy, has a different history and slower growth than ectopic pregnancy, and usually

attacks the uterus before it does the appendages.

When pregnancy exists in conjunction with any of these neoplasms, then the difficulty of diagnosis is much increased, and must depend upon a careful sifting out, and weighing of all the evidence, especially of all new local symptoms, and a shrewd interpretation of the patient's history.

#### DIAGNOSIS AFTER RUPTURE.

*From miscarriage with puerperal infection.*—In these cases the patient's statements are so often influenced by a desire to mislead that they must be accepted with caution.

Supposing the patient is septic and has a tumefaction in one broad ligament or in Douglass' pouch, is it a puerperal infection, or is it a septic hæmatoma, or hæmatocele?

Here the diagnosis is made if we can establish or disprove the fact of a uterine pregnancy having existed, for if there has been a true miscarriage we have a puerperal infection to deal with, unless there existed that rare condition of combined uterine and ectopic pregnancy. If uterine pregnancy did not exist, we have a septic ectopic gestation.

If we can examine the decidua, the presence or absence of the chorionic villi will establish the diagnosis, for there are no villi in the uterine decidua attending an ectopic pregnancy, nor is there a decidua reflexa. If the decidua is lost, we must depend upon the history.

The pains attending rupture of an ectopic gestation are more sudden in onset, more severe, more tearing in character, more irregular, less protracted, and are accompanied by more constitutional disturbance than those of a true miscarriage; rapid pulse and signs of internal hemorrhage would be present also. Another point is worth considering: practically all puerperal infections following miscarriages are caused by invasion of the uterine cavity by instruments or fingers of an operator. If such have not been used, the case is probably not one of puerperal sepsis. Again, the sepsis from a miscarriage develops more quickly than that from a hæmatoma or hæmatocele, and is usually attended by a more putrid vaginal discharge.

*From ruptured pyosalpinx,* by the different antecedent history of pus tubes. There is usually less excruciating pain attending rupture of a pus tube; the pulse and temperature quickly fall to near normal, but soon begin to steadily rise; symptoms are more of shock than of hemorrhage, and symptoms of peritonitis quickly appear.

In ectopic pregnancy the pain attending rupture is often the first serious symptom the patient has, and it is indescribably severe; the temperature is probably subnormal, and the pulse very high, but if the patient survives a few hours it usually falls; the symptoms are more of hemorrhage than of shock; peritonitis or sepsis does not usually appear for several days.

*From perforation of the bowels.*—Here the diagnosis is made by the antecedent history of appendicitis, or typhoid fever, or of malignant disease, and by the immediate onset of septic peritonitis following such perforations. Sepsis and peritonitis following ectopic rupture does not usually develop for a week after the rupture. The differential diagnosis between intra and extra peritoneal rupture is as follows: If the sack ruptures into the free abdominal cavity, the symptoms are more sudden and severe, the collapse of the patient more pronounced because there is nothing to limit the hemorrhage; for the same reason a hæmatocele is less well defined than a hæmatoma. And so if the rupture is subperitoneal, the symptoms are less sudden, the shock less profound, because the hemorrhage is somewhat limited by the confines of the broad ligament, but the pain may be more severe and prolonged and the tumor better defined and lower in the pelvis than is the case in the intra peritoneal rupture.

#### TREATMENT.

In a suspected case during the first weeks of the pregnancy the patient should be kept quiet, avoiding unnecessary exertion or excitement, and all preparations made for an emergency operation. Examinations should be made weekly for the rapid growth of the tumor is an important diagnostic point, as no other tumor would grow so rapidly excepting possibly pyosalpinx which is attended by septic symptoms. As soon as a diagnosis of a rapidly growing tumor at one side or behind the uterus is made, with co-existing symptoms of pregnancy an exploratory incision should be made; for if we anticipate the rupture much is gained.

When called to a suspected case with symptoms of internal hemorrhage, if the shock is not severe, and a tumor can be found evidently in the broad ligament, some authorities advise waiting till the patient rallies and the operation can be done deliberately; or to wait for the foetus to develop, unless the patient's suffering or subsequent events demand an operation.

I believe in operating at once for the following reasons: We cannot otherwise be

absolutely sure of the location and amount of hemorrhage. We thereby avoid the future dangers of septic conditions; the foetus is probably dead, and if not, the attendant dangers to the life of the mother of carrying it beyond the eighth month are greater than the probabilities of saving the child.

If called to a patient with a history of possible ectopic pregnancy who has just had severe pelvic pain and fainting, with pallor, feeble, rapid pulse, weak voice, restlessness, with tenderness of abdomen, especially if no well defined tumor in the broad ligament can be made out, we should operate without delay. A quart or more of hot salt solution should be put into the colon during anæsthetization and more into the subcutaneous tissue as soon as the patient is on the table. It should not be put into a vein until the bleeding vessel has been seized.

An incision sufficiently large to admit the operator's hand should be made at once, the bleeding tube seized and clamped and then the operation completed with deliberation and dispatch. If there is much shock, the toilet must be hastily performed and a quart of hot solution of salt may be left in the abdominal cavity. If there is a septic condition, or much blood clot left behind as is sometimes the case in late operations the abdomen should be drained by glass tube and gauze; this should be removed under chloroform the third day and a smaller one replaced to be removed two days later.

If the patient has reached the fourth month and is not suffering excessively it is the consensus of opinion that it is better to wait till the child is past eight months and then operate expecting to save the child.

The danger to the mother of an operation after four months of gestation is much increased by the fact that it is sometimes impossible to control hemorrhage if the placenta is removed. Unless it is possible to surround its attachments with ligatures before removal it is better to draw the cord through the abdominal incision, stitch the sack to the wound, thoroughly pack it with gauze and remove the placenta at a subsequent operation or allow it to be discharged spontaneously provided sepsis does not intervene.

In a case which has passed the fourth month, and the mother for any reason seems unable to continue with the pregnancy till at least seven and one-half months, it would be wise to terminate the life of the foetus by injecting into it with a long needle one-half grain of morphine.

The disappearance of placental souffle will indicate the cessation of foetal life, and three

weeks later or before if necessary the embryo and placenta can be safely removed.

My interest in ectopic pregnancy was aroused by the following cases.

CASE 1. Mrs. R., age 33, mother of two children, eight and five years old. Had three miscarriages, the last two and one-half years ago. Menstrual periods regular, painless, but excessive; troubled a good deal with backache for years. Last normal menstruation was Oct. 12, 1899. Dec. 13, 1899, was suddenly seized with pain while in church and fainted. Had a similar experience one week later, attended by flowing which was so severe the next day that her physician applied a vaginal pack. Pain and irregular flowing continued to Jan. 12, 1900, when the discharge becoming foul her physician curetted the uterus removing some placental tissue and portions of a foetus probably nine weeks old. Pain and irregular fever continued and as a tumor was discovered she was put into my hands for a celiotomy, Jan. 25, 1900. Examination revealed a tense, very tender, elastic tumor evidently in the left broad ligament. As the tumor seemed too large for a puerperal abscess with so slight a degree of sepsis a diagnosis of probable hæmatoma was made, and Jan. 27, 1900, assisted by Dr. Cousins, I opened the abdomen. It was evident that a left-sided tuboovarian pregnancy had ruptured into the broad ligament. The tubes and ovaries were inflamed and matted with the intestines by adhesions. Both tubes and ovaries were removed, an enormous hæmatoma removed from the broad ligament, and gauze and glass tube drainage instituted. The patient made a rapid and perfect recovery. Here was a twin pregnancy, but as no foetal parts were found in the abdominal debris, I am unable to say whether the pregnancies were of the same age or not.

CASE 2 was reported to the Maine Medical Association last spring, as follows:

This specimen of ruptured tubal pregnancy I removed from a patient May 30, 1901, with the following history:

Mrs. —, age 34, mother of child 7 years old. Her only other pregnancy terminated at 6½ months three years ago. Has never complained of uterine disease; general health has been fairly good. She menstruated regularly the 10th of March, but scantily the 10th of April. Had some nausea and dyspepsia for last two months. First complained of pelvic and precordial pain May 20th; pain with faintness May 27th, and two attacks in the forenoon of May 30th. I saw the patient about 2.30 P. M. of the

same day with Drs. Noyes and Newcomb. Pulse about 90 and weak; face pale, anxious; some restlessness and dyspnoea.

Bimanual examination revealed sensation of soft, ill defined, irregular tumor in right side of pelvis; uterus soft and patulous, not much pelvic tenderness. Some irregular vaginal hemorrhage had been in progress for several days. A diagnosis of ruptured tubal pregnancy was made. Median abdominal incision exposed several pints of dark, clotted blood free in the abdomen. The right tube, ruptured and bleeding, was at once clamped and removed. The embryo, a male child of about ten weeks, was free in the abdominal cavity, but still attached to the placenta by the funis. Hasty toilet of abdominal cavity with salt solution was made, and the incision closed with small gauze drain at lower angle. This was removed in two days and the patient made an uneventful recovery.

CASE 3. Mrs. B., of Thorndike, Me., aged 45. Married at 20, has seven children, oldest 23 and last confinement 7 years ago. Had one twin conception. Operated upon for polypoid growths of uterus two years ago. About July 3, 1901, she began to complain of her side. Dr. Head was called July 12th and found the uterus much enlarged and displaced to the left side, the cervix pulled high up under pubic bone, previously had pain in right side. Now has pain intermittent in character and considered to be labor pains. Passed some blood clots which were not examined. July 14 had very severe pain. Dr. Head found membrane in vagina resembling placenta, but not as thick. Temperature ranged from 99 to 100, pulse from 90 to 110. July 18 Dr. Cook saw her in consultation, and tumor behind uterus was diagnosticated. The attending physician states that she had no marked symptoms of hemorrhage, but still he was impressed by her looking pale and having a somewhat rapid pulse.

I went to Thorndike, July 22, and operated that noon, assisted by Dr. Head and Dr. Cook. I found a large, soft, patulous uterus pushed high up behind the pubis. Douglass' pouch was so filled by an elastic tumor that the folds of the rectovaginal septum was pushed apart. My diagnosis was probable intraligamentous cysts and miscarriage. When I opened the abdomen the dark blood clots at once told the story of ruptured ectopic pregnancy. The pregnant ovum had become attached in the right tube near the uterus, had ruptured first into the broad ligaments, and subsequently into the

abdominal cavity; bleeding had taken place so slowly that the patient did not show much shock. The intestines had become adherent over the uterus and the cavity thus formed was packed full of blood clots a week or ten days old. The tumor and blood clots were removed and as the patient was somewhat septic, drainage with gauze established. The patient made an uneventful recovery. This was a typical case of ectopic pregnancy ruptured into the broad ligament, in which I ought to have made a correct diagnosis if I had elicited a careful history before, instead of after the operation. Examination of the tumor showed that the amnion had not ruptured. It contained a few drams of fluid and a foetus the size of a large bean.

CASE 4. Mrs. W., age 44. Mother of three children, the youngest eight years old; had a miscarriage six years ago. Menstruation somewhat irregular and scanty, very little pelvic trouble. Menstruated as usual Sept. 25, 1901. No flow in October, but a few spots about Nov. 8th, felt somewhat ill just before Thanksgiving and thought she might be pregnant. Was attacked with sudden, intensely severe pain, low in the pelvis the evening of Nov. 30, 1901, and fainted: was seen that night by Dr. Hale, and again Dec. 1, and also Dec. 2, 1901, when she had another attack of pain and fainting. I saw her with Dr. Hale at Long Island that evening at six o'clock. Found a large, very pale woman, pulse about 180 and difficult to count, feeble voice, restless, subnormal temperature. Complete obstruction of the bowels since first attack three days ago, and almost constant vomiting of coffee colored fluid. Abdomen tympanitic and tender, an ill defined boggy feeling of tumefaction in the pelvis, uterus soft and large and very slight occasional discharge of blood from vagina. Diagnosis of undoubted intraperitoneal ruptured tubal pregnancy was made. Salt solution and strychnia were given at once. I advised immediate operation, but the patient would not consent till certain members of her family could be summoned. At nine o'clock P. M. pulse was 128. I returned to my office and went to the Island in the morning boat with my assistant, only to meet the husband with the statement that she was better and would not consent to be operated upon. I warned him of her danger and immediately wrote to her attending physician urging operation without delay. She improved for the next few days and passed a deciduous cast of the uterus. By the end of a week she began to show sepsis,

and on Dec. 12, 1901, came to the Infirmary with temperature of 103.8 and pulse 120. I operated the next morning, assisted by Dr. Bradford and Dr. Hale, removing a ruptured right tube with the ovary and some pints of dark blood clots from the abdomen, and drained the pelvis with gauze. Temperature did not decline until thirty-six hours after the operation, but pulse immediately improved. Gauze was removed under chloroform the third day, giving discharge to bloody serum. No drainage was used after the fifth day. Patient recovered without further incident and left the Infirmary Jan. 14, 1902.

CASE 5, I saw in consultation with Dr. J. B. O'Neill, Jan. 25, 1902. Mrs. C., age 34, mother of two children 9 and 6 years old. Had two miscarriages before her last child was born. Curettement and perineorrhaphy three years ago; menstruates too frequently and freely; has leucorrhœa and backache; menstruated Nov. 24, 1901, after only two weeks interval. About Dec. 20, she was thoroughly chilled and wet in a snow storm. Did not menstruate in December, but supposed it was because of her exposure. Had some abdominal pain the first week of January, 1902. Jan. 15 pain was so severe that it required  $\frac{1}{2}$  grain of morphia to control it. She began to flow slightly on this date. Jan. 18 she began to flow freely; and she states that on the 19 she passed something besides blood clots. This was probably a false decidua. She had pain requiring morphine Jan. 22, 23, and 24. I examined her with Dr. O'Neill Jan. 25. The abdomen was tender especially the right of the hypogastric region. A very tender tumor the size of a hen's egg could be felt in the region of the right tube; temperature range was below 100.

A diagnosis of unruptured tubal pregnancy was made and I had the pleasure of assisting Dr. O'Neill in its successful removal, Jan. 30, 1902. The specimen showed a tubal mole the size of a large English Walnut due to hemorrhage into the amniotic sack. A few drams of blood had oozed from the extremity of the tube; but this bleeding was limited by adhesions of the intestines. Gauze drainage for three days. The patient has made a rapid recovery.

Dr. W. B. Small, of Lewiston, in opening the discussion said:

*Mr. President and Gentlemen:*—It was a surprise to me when I was asked to open this discussion by reason of the absence of the selected disputants. Aside from the

reason already given by the President for their absence, it has occurred to me that perhaps after reading the papers they were in such agreement with the writers that they found little to add, and I find myself in much the same position.

The papers have well covered the subjects and while some of us may do certain things in a little different way, yet the principle is the same and we substantially agree with the methods recommended. I was pleased that such emphasis was laid upon the necessity of antiseptics or rather asepsis in conducting labor. No physician now ventures to attend a case of labor without taking precautions in this direction. A douche may be necessary in certain cases, but as a rule the consensus of the profession is to the effect that the secretions themselves are sterile.

In making the bed it is my custom to get rid of the feather bed and use a firm mattress if possible. It is fortunate that the feather bed is going out of fashion. After the bed is made up I place a pad over all, or a paper can be used. Everything about the bed should be thoroughly clean and no old dirty comforters should be allowed anywhere near the patient.

I tie the cord in two places and cut it between. After completion of the 3d stage I give no douche unless there is a direct indication for it. Repair the tears at once, and wash the baby's eyes with boric acid solution.

In regard to the appearance of puerperal fever after labor I have never had a case of any severity in my practice, nothing but what an antiseptic solution has relieved in a few hours.

As to the feeding of the baby, about two ounces is the proper amount as a rule, but no fixed rule should be laid down for some infants cannot take more than half an ounce at one feeding.

Dr. S. C. Gordon, of Portland, in opening the discussion on Dr. Twitchell's paper said:

In the year 1887 I received a letter from Dr. Frank Hitchcock, of Rockland, saying that he thought he had a case of extrauterine pregnancy. I went to Rockland that evening, confirmed the diagnosis, and we operated at eight o'clock. We found a foetus of three months and removed about a quart of blood. This case was reported to Dr. Harres and Dr. Thomas, and in the latter's book which appeared soon after, he said it was the first successful operation ever accomplished in the United States. This however, was a



mistake for Dr. Johnson, of Danville, Ky., had reported one successful operation in the November before, so mine was the second successful case. I had never seen a case of ectopic pregnancy up to 1887, but within the next one and one-half years I saw five cases. This case of Dr. Hitchcock's was the first case diagnosed before operation and to him belongs this credit.

In 1886 at a meeting of the British Medical Society, I heard Lawson Tait declare that a diagnosis of extrauterine pregnancy had never been made before rupture occurred. All over the hall physicians arose and disputed this dictum, but Mr. Tait in his impudent way answered that he doubted their diagnosis.

Within a year I have been called to Kennebunkport to see a woman suffering from peritonitis, very weak and with a history of a severe pain and collapse six weeks before. On examination I found a hematoma of large size, but she was so feeble and had so much peritonitis that we decided it was best not to operate at that time. A short time after she came to the Maine General Hospital, during my term of service, and we decided that she had ectopic pregnancy with rupture three months before. On opening the abdomen I found a large mass outside the tube, a gray mass as large as two fists and on opening it we found a five months' foetus alive. This was originally a tubal pregnancy. The tube ruptured, the ovum escaped into the abdominal cavity, formed a new attachment and the foetus lived and developed. If this case had gone on the child might have developed and gone on to a viable age, but there was no way of determining this at the time.

The next case I saw came to the hospital with a tumor and no other trouble complained of, though there was a history of an attack of severe pain about six weeks previous and at that time the patient had fainted. Since that time she had discomfort and a little soreness, and recently complained of pressure and weight in the pelvis. We opened the abdomen and found a three months foetus which apparently had been dead about three weeks. This shows what can happen in these cases, so that I think many of these cases can now be diagnosed before rupture.

Dr. J. B. O'Neill, of Portland, said:

*Mr. President and Fellows:*—Dr. Johnson's paper so well covered his subject, and Dr. Small has so emphasized the important points, that there seems very little to add. I would bring out the point that so soon as you have determined that you have a case

of normal labor or so long as everything continues normal you had best allow nature to carry on the process, but when complications are present or arise then the skilled obstetrician is needed. Absolute cleanliness is essential and the nearer we come to this the better.

Dr. C. E. Williams, of Auburn, said:

The first case of ectopic pregnancy I ever saw must have been shortly after that of Dr. Gordon's, for it was surely about fifteen years ago. I was called to a patient who had been taken with severe abdominal pains and vomiting. Not being so old then, and our knowledge of this condition not being so extensive, my first impression of this case was that it was colic, but on a return visit I found her so weak and fainting that I was sure hemorrhage was taking place. A council of four doctors decided that it was probably a case of extrauterine pregnancy with rupture, but it was decided to try and rally the patient before we operated. She rallied from the weak condition and was so well that she refused to be operated on, but a few weeks later symptoms of sepsis appeared. The abdomen was opened, the tumor appeared and was removed and about a quart of pus and blood washed out, and the woman made a good recovery.

We had another case at the hospital in which a woman had been attacked with severe colicky pains and collapse at her home in the country. She rallied under stimulants and was brought to the hospital. We found peritonitis and made a diagnosis of ectopic gestation. A few days later we operated and removed a large amount of blood and debris. The abdomen was washed out and closed without drainage and recovery followed.

The third case was that of an unmarried woman who became alarmed because she did not menstruate and went to an abortionist, who performed an operation, and sepsis followed. The after symptoms were acute pain, but not much hemorrhage. We found a tumor in the pelvis and opened the abdomen and found that we had a pregnancy occurring in the horn of the uterus, something I had not at that time heard much about. The uterus was in a bad condition, so that was removed whole, and she made a good recovery.

I have seen two other cases lately in which a large amount of blood was found in the abdominal cavity. This was flushed out and the wound stitched up without drainage, and both recovered. I have also seen one case in which diagnosis was made



before rupture occurred, and then, of course, the operation is much easier, for then there is no blood and no sepsis.

Dr. A. L. Stanwood, of Rumford Falls, said:

*Mr. President and Fellows of the Academy:*—In listening to the reading of Dr. Johnson's paper I was impressed with the lucid way he described his procedures, and I feel that these are those usually employed by us all. We all have about the same methods, but the details vary to suit existing circumstances. Like Dr. Small I get a firm mattress if I can, and then put on whatever is necessary to protect it and a clean sheet, or even a paper that has been baked, over all. Dress the patient by tucking up the clothes and put on a clean skirt fastened with tapes, removing all after the labor is over.

It is a very easy thing to deliver a woman in normal labor if you take precautions. Be cleanly and use aseptic precautions. Everything goes well provided you have anything like a normal place in which to confine the mother, but this we cannot always command. Like every other country doctor, I have delivered women in all sorts of places, in dirty huts, in dark attics and even on a brush heap. Labor under brush heap surroundings has dangers, and it is different from that occurring in a modern house, but in these days an antiseptic solution can always be made, and we make the best of our dangers and difficulties. You don't need to pay much attention to making the bed in brush-heap cases, for there is not much to work with.

For the partial anesthesia of labor I always use chloroform. It is more pleasant and less bulky, and I have seen no bad effects. Dr. Twitchell's paper was certainly a very able and instructive presentation of the important subject of extra uterine pregnancy.

Dr. Addison S. Thayer, of Portland, said:

*Mr. President:*—I have seen but two cases of ectopic pregnancy and these were promptly handed over to the surgeon before rupture had occurred and were operated on successfully.

Dr. J. S. Sturtevant, of Dixfield, said:

*Mr. President and Gentlemen:*—Like other country practitioners I have had considerable experience in obstetrics, though not so extensive as to include the brush

heap delivery. My custom is to call at once for an earthen or agate washbowl and make a warm bichloride solution and thoroughly cleanse and disinfect my hands. Every physician can easily do this and not to do so is to be neglectful. I use common twine as a ligature for the cord, but it is soaked in the antiseptic solution. Napkins are also immersed in the warm solution, and when we can do no better the nurse is instructed to press a napkin firmly up against the buttock so soon as the labor is ended. This prevents to quite an extent the soiling of the bed. These simple hints may interest the younger members of the profession who are practicing in the country where we cannot always command all the facilities we would like to have.

Dr. C. E. Williams, of Auburn, said:

If I may be permitted I should like to mention one point taken up in Dr. Johnson's paper, and that is the time at which the infant should first be put to the breast. We know that nursing acts as a powerful stimulus on the uterus, causing it to contract firmly, therefore I think the infant should be put to the breast just as soon after labor is completed as the mother is in condition to have it done.

President E. M. Fuller, M. D., of Bath, said:

I have little to add to this discussion, for the papers and the remarks have been both excellent and instructive, but there are a few points which I should like to make prominent and some of them have not been mentioned. There have been great changes in medical practice since I was graduated, and this is especially so in regard to the care of the breast. I was taught that if the milk did not appear promptly that sweet oil or some ointment should be rubbed vigorously into the breast. Now we don't rub the breast at all, but in many cases we find it beneficial to suspend and support the breasts with a bandage. Any physician can prepare a suitable support out of cotton cloth, and it often gives great comfort and benefit to the patient.

Another thing which I consider important is to examine the infant thoroughly, and especially the genital organs. In boys examine the penis, for how often do we see a child that cannot pass his water, because suffering from phimosis or adhesions to the glands. The genitals of female children should also be examined, and often they will

be found red and irritated and sometimes the lips closely glued together. Many so-called cases of colic are due to such conditions of the genital organs. Books say nothing about these things, but if you attend to these matters you will every now and then find a sick male infant with phimosis demanding circumcision, or a female child in which the lips of the vagina need to be separated.

Cleanliness is the one great thing for us to keep in mind, both as physicians and surgeons, and this rule applies with conviction in obstetric practice.

Another point. In regard to position in labor. Different nations seem to have different favorite positions. I am informed that in Ireland the mother kneels down supported by a chair, in much the same position commonly assumed in prayer. I have never seen anyone but an Irish woman assume this position, but it seems to be a common sense one, for when on their knees they get the benefit of the force of gravity, both of the child and the amniotic fluid toward the os uteri, and it is remarkable how easy some of them pass through labor in this position.

Dr. S. P. Warren, of Portland, President of the Section, said:

I wish to add just a word to what Dr. Fuller has just said. I am rather surprised that the doctor seems to think that this position is at all peculiar to an Irish woman, for I have seen it assumed very often by Germans, Irish and those of other nationalities, and we know that it is the position naturally assumed by all peasant women. They are bound to get in this position. You may put them back in bed, but they will persist in getting out and kneeling down by the bed or a chair.

There can nothing be said but praise of Dr. Johnson's paper, but he has not touched upon some things. One point that should be spoken of is, that the position of the child should be determined entirely by external manipulation. No examination should be made with the finger, and the genitals should not be touched at all. This can be done, and is being done every day by trained obstetricians.

Further, there should be absolute control of the uterus, not by Crede's method, but by a more common sense method of keeping it contracted. The Crede method is being given up because it presses the uterus into the pelvis, tires it out so that it relaxes and the danger of hemorrhage is increased. We

now lay the hand flat across the top of the uterus.

If you don't touch the woman's genitals, you can't have sepsis. You can deliver without touching the vagina, and in many maternities they insist on this method. In 1,000 cases of labor in Philadelphia it was found that where the position of the child was determined by external manipulation or where rubber gloves were used for internal examination, that no rise of temperature occurred, but among the cases examined in the old way with the finger, a greater or less rise of temperature was quite common. So we say you should not examine with the finger, for as a rule you can do better without. If labor is delayed or any complication arises then make a manual or digital examination.

One more point, and that is in regard to the initial feeding of infants. One part milk to two of water is, in many cases, too much milk. Dr. Holt's recent formula is made by taking one ounce of the top of the milk (after it has stood about three hours) and adding to it one ounce of lime water and seventeen ounces of water. This seems very little food for a baby, but it has been found to be enough, and the child does better if there is not so much milk and more water.

Dr. H. F. Twitchell, in closing the discussion, said:

*Mr. President and Gentlemen:*—I should like to say a few words about the treatment of these cases. When called to a case accompanied by severe hemorrhage, the rule is to operate at once, because you are not sure whether the patient will recover without, though it is true that some do recover. We can do very much to stimulate and revive these patients from collapse with normal salt solution. Order the nurse to inject one quart into the rectum and put one pint under the skin while the patient is being etherized.

Clamp off the tumor and then you have a chance to work more at leisure. If a blood clot has been removed put in a drainage tube for three days and then remove it and use gauze for drainage, because in such cases there is danger of sepsis following, and if it goes from bad to worse the patient will die.

In the last case mentioned in my paper the hemorrhage had occurred three weeks before and had been operated on at once, but no drainage was provided for and the patient died.

### What Shall We Do With Heredity?

By J. G. GEHRING, M. D., of Bethel, Me.

The bugbear of heredity has long filled the hearts of thoughtful parents with secret uneasiness: it has discouraged the efforts of the teacher: arisen like a spectre before the philanthropist, and served as a barrier to the efforts of the family physician.

One of the most hopeful signs in the world's onward march today, is the way in which science is clearing our vision upon this once dreaded subject. The supposed invulnerable walls of heredity are crumbling before the assaults of modern psychological knowledge, and through the crevices a new light of hope and courage is breaking.

How often have parents stopped in dismay at the sight of an unconscious gesture or expression, a suddenly revealed trait of character, or the sound of an intonation of voice in the child of their mutual love, which brought to their vision painful reminders of the family skeleton? What teacher of maturity is there who has taught more than one generation of a family, who will not speak of what he considers the limits of that child's possibilities? What experienced family physician who does not recognize, from his professional knowledge of the family tendencies, the note of warning which would remain unheeded by the more casual observer?

That these are some of the grave facts in connection with what we know of the trend of heredity, the above factors of society will readily testify, but they are, fortunately, only some of the facts. Today we know that what was supposed to be an invulnerable obstacle to the overcoming of a fault or even vice in a child, the fact that such fault seemed handed down from its parent, is not necessarily so.

Psychology is making clear, what physiology alone has not been able to do, that we can take an inherited mental or physical tendency in a child, and, within certain broad limits, encourage, repress, or even wholly replace it with a substitute that is better.

Working parallel with the laws of heredity, emphasizing and deepening them, and rendering them ultimately inaccessible to any modifying influence,—or, running counter to them, modifying, obliterating or wholly replacing, of equal potency in either direction,—are the laws of suggestion.

Suggestion, whether made to the child by parent or teacher; whether it be as example or precept; whether given unconsciously through environment or, in the failure of

such ordinary means through the more forceful channel of hypnotic suggestion, may be said to determine the real destiny of the future man or woman.

By this means there is in many cases opened a field of helpfulness which drugs and medication can neither reach nor influence; without which neither parent nor physician can make any impression; and we have forced upon us the dawning consciousness that the parent and teacher of the future must possess some of the knowledge of the psychologist, and the physician must combine with his training more of that of the teacher.

Paraphrasing an old aphorism, suggestion is the potter's wheel that shapes the plastic clay of the child's mind which, after it has passed through the furnace of oft-repeated habit, acquires the unyielding outlines of character.

Whether our physiological endowments be rich or poor, this and their subsequent possibilities depending upon the vigor and quality of the parent cells, they constitute within themselves poles widely separated by vast continents of physical, intellectual and moral possibilities.

Every one familiar with the breeding of animals and the propagation of plants is constantly brought into contact with this most stubborn of facts,—the infallible tendency to vary. It is alike the hope and despair of the breeder and the horticulturalist, the problem whose variations are kaleidoscopic and marvelously fascinating in their endless possibilities. If we but keep in mind this obvious and most important natural law,—the inherent tendency to vary, and deliberately assume the roll of the shaping power, instead of leaving it to circumstance or to the trend of the inherited impulse, we have the mastery of conditions that have otherwise seemed beyond our power.

The new-born infant is only a bundle of instinct,—and instinct is the already-existing impulse that possesses the nervous organism when it comes into postnatal existence. It is the impulse imparted by the molding power of the parent-cells, which can only procreate after their own kind. Instinct, or heredity, is but the sum of the experiences of our innumerable ancestors,—the accumulation of wisdom filtered out of the history of the race. These experiences have always been the result of experiment, for every child born into the world is one of nature's experiments, and for the organism to experiment seems to be an inherent part of the life-principle itself. Were it not for this experimental tendency there could be no law of

natural selection, no survival of the fittest, no adaptation to constantly changing surroundings; the individuals of every race of animal and plant life would begin to perish from that hour.

The fallibility of the ordinary conception of heredity must be obvious to every one, since no two individuals of a family are ever alike. They may be somewhat alike, in some things, but the traits of dissimilarity are far in excess. Its tendency and great readiness to vary is the chief characteristic of the organism, and based upon this tendency are all of the child's future possibilities.

With the instinctive or subconscious mind of the infant alone in evidence, we have a blank page eager for impressions, appropriating every one that presents itself with a marvelous assimilative power. The young subconsciousness is possessed of a virgin hunger which grows, unappeasably. All of its surroundings instantly assume the character of the shapers of its own destiny, and in this the most trivial things may have an import as serious as the most great. The senses of touch, of sight, of smell, of sound, of taste, and even the processes of the physiological functions of the body, bathe it constantly in a sea of new sensations. Though these are at first but vaguely appreciated, they establish, through frequent repetition, channels of receptivity that continually become more clearly recognized and finally established.

The budding consciousness must take some shape, since grow it must, but like unto the young leaves of a plant kept in a dark place which grow in the direction of the source of whatever light there may be, it also will grow in the direction of whatever the suggestions of its environment may be, rather than that of any predetermined source of direction behind it. So great, even, is the plasticity of the young consciousness that, as in the case of the young plant, re-shaping may be done again and again. Yet, as time goes on, the parallel between child and plant holding good to the end, the plasticity lessens, the soft cells of the plant becoming hardened and matured into tougher texture, and the nerve-cells of the child set in the direction of the routine they have most frequently performed.

It is in this manner that temperamental peculiarities of the parents are acquired. Less because they are those of the progenitors of the child, than because they are the peculiarities of those who are constantly surrounding the child,—who thereby estab-

lish their own atmosphere for the susceptible infant to grow in.

Heredity is but a transmission of tendencies, a predisposition on the part of tissue and nerve-cells to do things in a certain way by reason of ancestral cells having done so before. This way, if unhindered, i. e., if the environment is the same as that of the parents, will most readily repeat itself in the offspring. But it is a way that is at the same time largely capable of being modified. Proteus like, into innumerable forms of human energy, differing, often vastly, from the inherited predisposition.

Neither are the transmitted tendencies always those of the parents, because there exists the tendency to reversion to some other ancestor more remote than the immediate one. There exists also the tendency to vary, to "sport" in the language of the horticulturalist, wherein the individual may prove to be wholly unlike anything that has gone before. The merging of parental tendencies in a child is therefore not always an assured fact, the union often serving as the means of liberation of more remote family peculiarities, or, in conformity with the law of variation, giving a departure entirely new. A common illustration may serve, wherein children of parents gifted with marked musical abilities, are frequently not endowed in like manner, or where a mathematical or an exceedingly practical mind may be the offspring of a union of marked artistic temperaments.

All of our virtues and all of our faults, according to Professor James, are merely habits. "The 'smoking-habit,' the 'drinking-habit,' and the 'swearing-habit,' are no more habits, and no less, than the 'abstention-habit,' the 'moderation-habit,' and the 'courage-habit.'" We are an organized product of habits,—emotional, practical, and intellectual,—and equally of physiological habits,—and all of these are, as the case may be, for our weal or woe. It is but the result of repetition that any act, be it of the mind or body, be it normal or abnormal, becomes more and more easy, owing to the plastic nature of our nervous selves. Such acts ultimately repeat themselves without any consciousness at all.

Professor James says that "ninety-nine hundredths of our activity is purely automatic and habitual. From our rising up in the morning to our lying down at night, our dressing and undressing, eating and drinking, greetings and partings, \* \* \* nay, even most of the forms of our common

speech, are things of a type so fixed by repetition as almost to be classed as reflex action." Hence the importance of acquiring as early as possible, as many desirable habits as may be, in order that they be done automatically and without conscious thought.

Society has among its members far too many individuals who represent to a pathological degree, instances wherein even the commonest daily duties of life have to be done consciously. The writer has in mind a middle-aged man who would spend the larger part of a forenoon in an inability to decide whether he should wear black or tan-colored shoes that day. Another instance that of a boy at one time under observation, who could never, at any time, draw on his stockings in the morning without first whistling. Instances of this kind, illustrating the persistence of habits of early defective training, resulting in subsequent disability for practical living, could be multiplied indefinitely.

To the same formative influences that establish our virtues and our vices, we owe the causes that have to do with the deflections of our bodies from the normal. These influences consist of either the hereditary tendency, of environment and unconsciously acquired habit, or of deliberately chosen methods which we call educational, and are usually of all three. They are, in other words, ideas that reach the consciousness and through repetition become established; they become involuntary, automatic, reflex. To the cumulative results of these manifold suggestions we owe a normal mind and body, a well-balanced character, or, their opposites.

The infant that is permitted to put its finger into its mouth, or grasp its mother's ear to keep it quiet, continues to do so from habit, automatically, often long after the years of childhood are past. The child which, in order to sleep, must take its doll to bed, may awaken from sleep in later years and, subconsciously, for the reasoning consciousness knows nothing of this and would not approve, grasps to its breast the corner of the pillow before it can fall asleep again. A gentleman of the writer's acquaintance traveled all over two continents, when a child, with an old piece of fur, the stroking of which was a necessary procedure before sleep could be induced. The child that must thrust its foot forth beyond the bed-clothing in order to sleep, possibly in part because of inherited tendency, the parent having done so before, but also because of mimicry, continues to do it into adolescence unless the habit is corrected by

conscious suggestion on the part of the parent, or by more forceful hypnotic suggestion. The baby-talk of infancy and childhood is taught by the parent, who emphasizes, enlarges upon and reiterates the imperfect speech until, as is often seen, a mature young man still lisps or cannot pronounce certain words correctly. Habits of stammering and stuttering are acquired in childhood by reason of the withheld suggestive measures, which would have prevented the hesitating speech in its incipency, from engrafting itself upon a sensitively poised and self-conscious nervous system.

To a much greater degree than in any of the lower animals, mimicry is one of the chief formative agents of the child's habits and character. Psychologists are agreed that man is *the imitative animal*, and to again quote Professor James, "each of us is, what he is, almost exclusively by reason of his imitativeness." The child imitates its parents in the things it sees them do, and practically all of its acquirements are merely copies of the actions, ideas, and aspirations of its parents, of other children, and later on of other people. An expressed dislike of the parent for any given article of food, is imbibed by the child as a suggestion that goes home, and it may for years after continue the unreasoning antipathy. The absence of the wrongful suggestion, or the substitution of the corrective one, would have remedied the fault.

The factor of heredity is in so many cases to blame only in so far as it is a leaning, an *impulse* and a *tendency*, it is *not an ultimatum*. Tuberculosis and cancer, those great scourges of civilized peoples, are *not* due to inheritance, though long years of helpless ignorance have passed before we could understand. The former can now be cured because we have the knowledge and the courage, and the latter is contagious and not hereditary, and will some day also be obliged to yield because of the inevitable progress of knowledge.

The remedy for faults of manner and of character is already well recognized by progressive teachers; it lies in the skillful substitution of a correct idea for an erroneous one. The principles of suggestion are here already applied. This is the highest form of the teacher's art and is of importance in direct ratio with the youth of the child. But all such corrective training is done by means of the round-about way of the child's waking consciousness. If however by means of hypnosis the child's waking consciousness is suspended, there is opened a direct road to

its subconscious mind which, after a few repetitions, accepts the corrective statements as facts, never questions them, and they will henceforth become a part of the child's character.

By this means we can cause an untruthful child to become truthful; vicious habits to be replaced by normal and unobjectionable ones; affection and obedience can be substituted for their opposites; dull and stupid children can be brightened; habits of studiousness and mental concentration can be established where they seemed hopelessly absent.

The remedy for faults of the nervous system which manifest themselves in endless forms of imperfect functioning, when not successfully reached by any of the usual methods of medication and hygiene, lies in the like process, in hypnotic suggestion. Suggestion, given in the hypnotic state, may make such impressions upon an imperfectly or abnormally acting nerve-centre as to permit the normal function to prevail. It may establish an entirely different "set" to the functioning centre, causing new and healthier motor influences to be sent forth.

Children who are imperfectly nourished and who may be developing a cachexia, and who cannot be made to eat through either coaxing, coercion, or tonics, accept under hypnosis suggestions that they are going to be able to eat and to enjoy the needful kinds of food, and in consequence a new impulse towards nutrition is imparted to the organism.

When we give medicine for the purpose of correcting an obstinate bed-wetting habit in a child, we expect, by its action upon the nervous system, to bring about such modifications in its functioning as to correct the difficulty. But sometimes we fail in our results. When we give such a child a few emphatic hypnotic suggestions that the trouble shall no longer occur, we succeed, if there be no organic cause, in so impressing and altering the habit of functioning of that particular nerve-centre as to cause the trouble to promptly cease. In such cases we often do succeed with medicine; but when we fail, we are almost sure to succeed with suggestion. We do not know of any direct remedy among drugs for the habit of sleep-walking; we should get at it only by means of the improvement of the general health. Yet, oftentimes one emphatic suggestion, given in hypnosis, remedies this trick of the subconscious self. Children suffering with night-terrors are promptly relieved by a few hypnotic suggestions that

they shall no longer talk or cry out in their sleep; the subconsciousness accepts these positive statements as facts and at once establishes them as such.

We here arrive at a point wherein it may need to be made more clear how these things are brought about. How is it that a new idea, a new way of doing things, can be received when older ways, even if not desirable, have been so long established? Why, for instance, can a child be made to accept the idea that it be truthful, or affectionate, or to no longer run away from school, when it cannot be reasoned or coerced out of doing these things? Why can we correct function in such manner as to correct faulty physiological processes, in cases where medicine is of no avail, or even in lieu of medicine?

The solution will lie in the fact that although the human consciousness is a structure of great complexity, and still imperfectly understood, we have learned that its underlying stratum, the subconscious-self, is within certain not yet well-understood limits, distinct from the ordinary waking or objective-self, and that the former is the source of the motive power of all of the body's functioning. We have also learned that impressions made upon this underlying consciousness, (or subjective, subconscious, or subliminal self,) will be received, and without consulting the reasoning or objective self, and even at times in direct opposition to the latter, will be carried out to whatever the natural limits of the organism may be. We know that this is the consciousness that is entirely in evidence in the infant, (when the reasoning consciousness has not yet developed,) and is very largely in evidence in the child, diminishing in its accessibility as maturity approaches and the objective consciousness develops. Yet, in maturity, and even into old age, the subjective self may be reached by means of the hypnotic state, and is in all of us continually accessible in the waking state to varying degrees.

Whenever in the waking state our ordinary reasoning consciousness is lulled or absorbed, it is the subjective self that comes more largely into evidence and receives impressions more forcibly. Exactly for the same reason that we can implant any sort of an impression upon the young child's subconscious mind and by repetition cause it to become permanent, so can we in later years, through the same channel, make impressions and cause them to become permanent. The only difference will lie in our method of procedure. The subconscious mind is always



ready to do, as we would have it do, consistent with the limits of the rational, if we can but get at it.

But we must bear in mind that the process of suggesting to the subconscious mind is a subtle one; we cannot get at it when the objective consciousness is on its guard; it must be in either a round-about or indirect manner when the individual is awake and alert, or it must be done in hypnosis when the waking consciousness is still more suspended. The skillful stump-orator or revivalist engages the attention of his hearers in the one direction, and through side entrances thrusts in his suggestions. They are moved to voting for whatever candidate or principle may be suggested, or to feelings of religious emotion or fanatical frenzy, the reasoning consciousness being for the time entirely suspended, literally "spell-bound." The principles of mob-action are of the very same nature, based entirely upon the partial suspension of the reasoning self.

Innumerable physiological phenomena are constantly being produced in all of us through the same channels. The act of yawning at the sight of another's yawn is the most familiar of all examples. Nausea, hunger, thirst, can easily be awakened in any one upon the appropriate suggestion. Certain epidemics, extending from the present time away back into ancient history, have been wholly due to suggestion. Social, religious, ethical and speculative epidemics are abundant in the land today and their etiology is always that of suggestion in the waking state. A prominent professor of chemistry in a New England college has told me recently that he never lectures upon the subject of sugar in the urine, but that he expects to find as many as half a dozen students who come to him with grave anxiety, convinced that they have many of the described symptoms. The only difference between such suggestibility and that of hypnotic suggestion is one of degree and in the method of administration.

Suggestion in the waking state works always indirectly, *i. e.*, it must get in through side entrances upon what is called the marginal consciousness, the focus of attention must be elsewhere directed, whereupon the marginal consciousness will greedily absorb whatever suggestions may be abroad.

Suggestions in hypnosis must always be given directly, with positiveness and force; it must be hammered into the subconsciousness with great insistence. The reasoning self here is suspended, for the subconscious self cannot reason up to a subject, induc-

tively, it can only reason down from it, deductively, accepting whatever premises are placed before it,—always provided that these statements be consistent with the legitimate and possible. In making such suggestions it is to be understood that we do not say a thing is so because it is so at the time, but we say it is so in order that it *may become* so. In treating a patient for a rheumatic or a neuralgic pain, the pain is real enough, at times even to the degree of its objective symptoms as evidenced by inflammation and swelling, but often upon positive statements to the subconsciousness that it is not present, it ceases to be present.

A lady suffering from one of the numerous morbid fears, as instanced in one of my patients, who could under no circumstances go down the street,—who was wholly inhibited from going beyond the dooryard by reason of a nameless conviction that she could not, learned shortly to lose all consciousness of her besetting phobia upon appropriate suggestions. A little boy of eight, so pale and anæmic that his ears were translucent; who was wholly spiritless and was passing from five to six times the normal amount of urine per day; and in whom I could awaken no response through the administration of suitable tonics, underwent a complete change for the better when hypnotic suggestions were given. It was suggested that he eat well, have no desire to pass water but a limited number of times per day, feel stronger every day and also that his spirits should rapidly improve. The first treatment was followed by an immediate cessation of the abnormal secretion of urine, and during a period of six weeks, wherein treatments were given, he gained ten pounds in weight and became a child full of springs and bounds and antics when at play upon the street, and a happy, animated boy in the home and at school.

A little girl of six had been steadily losing in weight because of her strong dislike for food and seeming inability to eat, and would respond to neither the coaxing of the mother, nor the various tonics administered. She was at first gradually and then more rapidly brought to taking more and more food, and the restoration of a normal appetite, rosy cheeks and superabundant spirits, upon positive suggestions, repeated over a period of some weeks, to the effect that she could and would eat an abundance of such food as was indicated.

A boy of nine who was backward at school, afraid of and unwilling to play with other children, given to frequent fits of morose-



ness and temper, had night-terrors and refused to eat the food placed before him, and who could not be induced to leave his mother's side, became, in the course of a dozen treatments by hypnotic suggestion extending over one month, wholly changed into a sunny, happy child who ate normally, was able to keep up with other children of his age at school, not afraid to recite before his class, and quite willing to absent himself from his mother for days.

Moral perversions in children as well as in adults, are often based upon physiological disturbances of the system, for there is a parallelism between moral and physiological states and the one can influence the other. Existing disturbed physiological conditions often express themselves in perversions of the mental and moral nature as is evidenced in melancholia and the various insanities, the toxic nature of which is at present unanimously agreed upon by alienists; we also know that in crime and immorality the basic physiological structure is of a nature to predispose to such perversions. It does not follow that all perversions toward crime are capable of rectification, but there is a numerous class wherein by means of education and suggestion, a new and corrective impulse can be given to the neural discharges, which will determine brain impulses into more normal channels.

A case in point is that of Mrs. X—, a woman of middle age who had for years been in a state of great mental irascibility and given to violent and uncontrollable fits of anger towards her husband. Her facial expression was one of sullen discontent, and she was in a state of great mental depression. There existed at the same time much muscular weakness, a marked disturbance of the functions of nutrition and elimination, irregularity of other functions and an asthma so aggravated as to give her face a markedly livid hue. Occasional treatments by hypnotic suggestion, given over a period of three months, entirely changed this woman into a wife who had perfect control of her temper and who was always affectionate towards her husband. She felt happy and possessed of kindly feelings toward all people, became able to work, nutritive and other functional irregularities became normal, and the intensely aggravated asthmatic distress was reduced to its organic minimum, with a total disappearance of the cyanosis.

It is not to be supposed that individuals who are suffering from disordered physiological functions, dominated by exaggerated or perverted moral, social or intellectual traits,

are devoid of normal impulses as well. These latter may be, and usually are, present, but are repressed by the overpowering nature of the dominant wrong ones. It is here that hypnotic suggestion, reinforcing powerfully whatever methods of educational suggestion may be applied, is able to direct the functioning impulse more strongly in the desired direction; by repetition and the resulting prolongation of the desired activity, there ensues a lifting of the inhibition that prevails, enabling the inhibited centres to do more effective work.

No remedial agent can rank for potency in the same category with that of hypnotic suggestion for children, in disorders such as those referred to above, and which are of the nature of mind and body-habits. It is a molding power of unparalleled force since it lays hold upon the subconscious self, so accessible in children, and it is the subconscious self that *does things*!

Even in sleep it is perfectly feasible to communicate with the subconscious mind a child. It is but necessary to make the appropriate suggestions in a low tone, with clearness and force. Though the child is not aroused to a consciousness of what is going on, it gradually comes up out of the total oblivion of deep sleep to a sufficient degree to receive and register the impressions that are being made, and when these cease the child sinks back again into the deeper slumber, having no knowledge of what took place; but the subconscious self has retained the impressions and proceeds to carry them out. The writer has frequently treated children and even adults in this manner with perfect success, particularly in cases where hypnosis could not be readily induced.

We are often desirous of treating children by suggestion who are too young to hypnotize, since to induce hypnosis it is necessary to claim and hold the attention. By reason of the great accessibility of the sub-conscious self during sleep, there lies open a broad highway whereon the physician, and even more the parent, can approach the plastic subconsciousness of the child and engraft upon it whatever modifications are needed. Whether such suggestions be for the correction of faults, the molding of character, or the correction of abnormal functioning of the body, they are all equally feasible and of the utmost potency. The several instances cited above as amenable to hypnotic suggestion are merely isolated cases, taken almost at random out of a constantly growing material

from the writer's experience, which could be multiplied many thousands of times from that of observers in every part of the world.

The infant is born with merely an instinctive or subconscious mind, which is its first and life-long inheritance, and which, with its suggestibility, is its strongest, dominant force through life. The subconscious self is the primitive self, the functioning self. It is that self which receives and retains all formative impressions of body and mind as well. The subconscious self is always accessible and always open to modification in its manner of doing, in inverse proportion to the age of the individual. The reasoning or conscious self is but a later action engrafted thereon.

All the impressions, all the ways of doing that have been acquired during the lifetime of the individual, are held in custody by the subconsciousness; they are all impressed to varying degrees, dependent upon their intensity and frequency. It is the reasoning, the objective self only that holds so many of these impressions in leash. The latter would do many strange things were not the former in evidence, and that it does do strange things is shown by our dreams, and in conditions of disease where the governing self is suspended.

We can not shape a poet, a philosopher, an artist or a financier out of any given mental equipment, any more than that we can go beyond a maximum physiological limit with which an individual may be endowed, but we can recognize the tendencies of a child, and bearing in mind the wonderful susceptibility towards modification with which it is endowed, the great law of variation, and the equally great law of suggestion, we may intelligently co-operate with these and thereby enter into a future for the parent, the teacher and the physician, whose limits of usefulness will far transcend anything that has hitherto been reached.

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#### Nutrient Preparations as Substitutes for Meat, With Special Reference to Nutrose.

**O**PINIONS as to the value of artificial nutrient preparations and the limit of their employment are now so far developed that there is general accord in the view that, wherever possible, they should not be allowed to take the place of ordinary diet, however subtle their preparation, and that they only constitute a valuable addition to the diet, which, in no case, can be completely dis-

pensed with. In cases of diseased stomachs or intestines, or of a repugnance to a particular kind of nourishment, or where ordinary foods cannot be properly assimilated, artificial food-stuffs are indicated.

Under these circumstances, it is necessary for the physician to be familiar with the composition of the various preparations and to pay close attention to the indications for their employment. If, for instance, the digestion of starchy foods is deranged or incomplete, from an excess in secretion of acid, a diastatic malt extract or dextrin flour may be administered to lighten the work of the stomach. In order to increase the supply of fat, chocolate can be given with advantage. In wasting diseases, one should seek to make the food more nourishing, without an increase in volume; again, whenever it is necessary, as so frequently is the case, to enrich the food in albuminous or nitrogenous constituents, either because the albuminous constituents are not present in sufficient proportion in the ordinary foods, or they cannot be assimilated or absorbed, as is frequently the case with a meat diet, recourse should be had to one of the numerous meat substitutes.

Different methods have been adopted to gain this end. First may be mentioned extracts of meat and meat juices, the actual value of which, however, is small, their stimulant action being most in evidence. Then we have the leguminous preparations and finally the albuminous and pepton products. These have been recommended from the belief that the digestive organs are spared a part of their work necessary to peptonize the food. It has been determined by experiments that these foods are able to replace the albuminoids in the general diet. There is, however, no theoretical basis for their employment as artificial foods, since the albumins and peptons present no advantage over soluble albumens; while it can be safely said that there is scarcely a preparation of this class which does not cause irritation of the alimentary canal, nausea and a disgust for food, notwithstanding there is little odor or taste. For this reason the albumins and peptons have been abandoned and attention paid to the preparation of suitable albumen compounds, of which nutrose derived from the casein of milk, deserve consideration. The incoagulable and consequently sterilizable egg-albumen, protogen, prepared by the action of formaldehyd upon the white of eggs has been used. The administration, however, of this theoretical preparation was disappointing, as with

somatose, for the reason that it was found that the quantity permissible is too small to supply the requisite amount of albumin. If we estimate the daily consumption of albumin required at three ounces, more than three-fourths have still to be provided for in some other way.

Nutrose (casein-sodium) and eucasin (casein-ammonium) are prepared from the casein of milk. It will be asked wherein these products are preferable to milk, to which answer will be made that, in the first place, with them it is possible to give albumen without the accompaniment of milk-sugar and fat; further, that large quantities may be administered without materially increasing the volume of the food, which is so often an objection to giving milk; besides, milk very frequently cannot be tolerated, causing diarrhea and obstructing the intestinal tract with hard coagula; finally there is often an unconquerable idiosyncrasy to milk.

Nutrose is without odor and taste, while eucasin smells strongly of cheese. It may therefore be assumed that eucasin is an unsterilizable preparation and that it easily undergoes a slight degree of putrefaction, while nutrose may be regarded as a sterile product. Solutions of nutrose are capable of fixing a fairly large quantity of hydrochloric acid before free acid occurs. Again, eucasin separates the lactic acid from milk and the solution in either cold or warm media always leaves an insoluble residue, while nutrose, when stirred with lukewarm water or watery fluids, and afterwards heated, gives a complete solution in nearly all preparations. The more concentrated the solution the more thick. "We can safely assert (*Bruno Oppler, Breslau Therapeutic Monatshefte*, April, 1897,) that absorption and utilization of nutrose has proven to be very complete and that simultaneous proof showed that the albumin of ordinary food may be wholly or partially replaced. Experiment is equally favorable as regards the acceptability of the preparation, the absence of undesirable by-effects and of repugnance arising from continued use. With a single exception, nutrose was taken in all cases willingly, or, at least, without aversion, even for long times. The exceptional case was that of a young, nervous female patient, who possessed an aversion to all such preparations. This was so far overcome, however, as to make it possible to give twelve ounces of nutrose in eight days; there was no irritation of the stomach or intestines, which is all the more important,

as the patients all suffered from diseases of the digestive organs. Even when diarrhea existed, the bowels or stools were not influenced when large quantities of nutrose was administered. There was no influence upon the appetite, and the quantity of other food was not reduced, so that the nourishment was increased to the extent of the nutrose given. There is no limit to the quantity which may be administered, and this fact should be regarded as of the greatest importance, for we are thus enabled, as the preparation contains ninety per cent. of pure albumen, to cover two-thirds, three-fourths and in some instances the whole supply of albumen required by the individual. This cannot be attained with other preparations, because of the irritation produced in the digestive tract by much larger quantities in order to secure the amount of albumen."

Nutrose is preferably administered in soups ( $\frac{1}{2}$  to  $\frac{1}{4}$  ounce to each plateful), milk, coffee, cocoa ( $\frac{1}{2}$  ounce to each cupful), or when less liquid and more solid food is indicated, with barley, rice, oatmeal, etc. ( $\frac{1}{2}$  to  $\frac{3}{4}$  ounce with each portion). Nutrose can also be given with jellies and creams.

The indications for the employment of casein preparations, such as nutrose, are numerous. In tuberculosis and all wasting diseases, cardiac and renal affections, cachexia from whatever cause, constitutional anemia and after hemorrhages, and in all affections where it is desirable to increase the albumen contents of the food imperceptibly. When there is repugnance to flesh food, as in chlorosis, diabetes mellitus, etc., and in convalescence in order to introduce as much easily assimilated food as possible, after operations upon the rectum, where a less voluminous diet is desired, in febrile diseases, where only fluids can be taken, and in gout and uric acid diathesis, when we are enabled to convey to the system the necessary quantity of albumen without the nuclein, which makes meat an objectionable diet. In the numerous diseases of the alimentary canal, nutrose will be found especially useful. Stenosis of the esophagus, whether from stricture or from carcinoma. When milk could not be given, much less solid food, the milk forming cheesy coagulations above the diverticulum.

In diseases of the stomach, when there is diminution or failure of hydrochloric acid in the secretion, from whatever cause, this remedy will afford certain relief. In such cases, the digestion of meat, eggs, and often milk, will be found most difficult, and a

partial, at least, substitution of these albuminoids is most desirable. In simple gastritis and in nervous anacidity, it is easily assimilated, affording no hindrance to intestinal digestion, thus avoiding the later complications of intestinal insufficiency and compensatory disturbances.

In gastritis with lack of hydrochloric acid, the digestion of meat is accompanied with subjective and objective disturbances, such as painful pressure, wind, eructations, nausea and vomiting. These symptoms may increase if the secretory weakness is accompanied with motoric debility by development of atony of the walls of the stomach. In stenosis of the pylorus, simple or carcinomatous, complicated with anacidity, artificial nutrient preparations are indicated, as meat, eggs and milk often cannot pass undigested the contracted pylorus and consequently undergo decomposition. The ability of nutrose to combine with the acid makes it especially a desirable nutriment in hypersecretions of hydrochloric acid and in ulcer ventriculi. Finally, in chronic diarrhea, where all meats must be avoided, the deficit of albumen can be made up by administering nutrose.

It may be given in the form of enemata in aqueous solutions, with the addition of salt, and as an addition to the ordinary egg and milk enemata.

#### Tetanus Appearing in the Course of Vaccination.

By E. D. O'NEILL, M. D., Biddeford, Me.

**N**O question appeals with more urgency to both physician and patient than the one presented under the above title. It is well to consider the rapid succession in which this case followed the vaccination, the ulcer developing into a nidus for tetanus germs, and with equal care to study the exact relation borne by the vaccine to tetanus infection.

The following case, which came into my care during the month of December, is a marked example both of the untoward influence of the shield, and of a tetanus infection taking place beneath the shield.

D. J. L. Aged 28 years, vaccinated by another physician just six days previous to being seen by me. This young man has good family history. Father died at 56 with typhoid fever. Mother is in good health. When seen by me December 18, 1901, arm was very sore, the red inflamed area was circumscribed as completely by the edge of the shield as though a line had been

drawn. The shield itself was removed by me for the first time since its application, was bound to the arm and to the vaccine sore by the pus and lymph collected and coagulated beneath, the discharge having a very offensive odor. He complained of his jaws (in his words), as though some one were pressing them with their hands, could hardly move his jaw, and his words were very indistinct. No elevation of temperature, pulse ninety. December 19, he was confined to bed and hardly able to move his jaw; his speech was so indistinct I could scarcely understand him. T. normal, p. 104, resp. 18; intense pain in epigastric region, no sense of feeling in the extremities, mind very clear, unable to take any food. December 20, unconscious, jaws locked, and lying in a position known as opisthotonus (or resting upon head and heels), no fever, p. 120, resp. 12.

During the day had five convulsions of the same character. December 21 had seven convulsions. December 22, three, December 23, one, December 24, none.

Had considerable pain in head, and extremities were in a partially paralyzed condition for the next five days. Fifteen days after first symptoms appeared, he is about the house, and in good health, considering the serious condition of his illness.

#### TREATMENT.

Kept patient in dark room, where all was quiet, and allowed no visitors; morphine and atropine hypodermically, alteratives and sedatives in combination, in large doses. It is very important to know the drug you are to use and then push it, know when to continue and when to stop.

Watch the case. Chloroform was administered to relieve the spasms.

Maine's great statesman once said, and it was very true, what the people needed was *confidence*, and that is just what the physicians need and especially in serious cases; confidence first in ourselves; confidence then in our patients, and confidence in the treatment we give.

#### Unawares.

A song welled up in the singer's heart  
(Like a song in the throat of a bird),  
And loud he sang, and far it rang,  
For his heart was strangely stirred;  
And he sang for the very joy of song,  
With no thought of one who heard.

Within the listener's wayward soul  
A heavenly patience grew,  
He fared on his way with a benison  
On the singer, who never knew  
How the careless song of an idle hour  
Has shaped a life anew.

—Alice Williams Brotherton in *Poets and Poetry of Indiana*.

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PORTLAND, MAINE, APRIL, 1902.

## Editorial.

### Variety and Sex.

All biologists at the present time seem to have agreed to the general proposition that variations are the foundation stones of the evolutionary theory.

But so soon as this basic principle of the theory is conceded, there are at least two theories as to the way in which new species might have arisen. We know that if the eggs of a certain bird are examined that there will constantly be detected slight differences in the size, shape, color and weight of the eggs of the same bird. So there are slight variations occurring in the length of the beak, the shape of the toes, the length of the wings, and in other respects, until we see clearly that, though we have no difficulty in deciding which family the offspring belongs to, yet we also discover that no two of the progeny are exactly like the parents or like each other.

Mr. Darwin's theory of the origin of species declared that the law of natural selection, seizing upon such slight variations, and working through long ages, would be sufficient to finally explain the appearance of a new species. Thus among the ancestors of the deer family there were certain individuals developed so varying from the

chief characteristics of this family—speed in flight—that some of them were unable to escape their enemies through flight, so that of necessity they were compelled to stand at bay and meet their enemies in fight. The law of natural selection seizing upon this variation from the original type, and working through long ages, finally evolved “a new kind of deer”—the buffalo—an animal which, instead of trusting to speed for safety, stands at bay and fights its enemies face to face.

This Darwinian theory of the origin of species was generally accepted by scientists, not because it was entirely acceptable, but because it seemed, with present knowledge, to offer the most satisfactory explanation of facts. Within the past few years, however, there has arisen a group of scientists who declare that the Darwinian concept does not afford an adequate explanation for the origin of species. Some of these objectors raise the point that, working through nature's plan of constant slight variations, there is also a more radical form of variation, which, if it should be perpetuated so as to be transmitted by heredity, would form a more scientific basis for the origin of species. Other individuals contend that both the influences of heredity and of variations, acted upon by the influence of the environment, are necessary to account for the origin of species.

These questions have long been ground for contest, and the matter is still sub judice. Nevertheless, certain facts recently brought to light seem to be likely to exert a powerful influence in deciding this important question, although the facts were elucidated by experiments conducted in another department of biology.

For several years the inquiries of biologists all over the world have been directed more especially to decide the following questions:

First. Why should the offspring of animals and plants be like their parents?

Second. Why should the offspring of animals and plants be unlike their parents?

The first question, as all will see, involves an explanation of the phenomenon of heredity, and the second includes the rule governing variations.

The laws of heredity are even in our day very little understood, and heredity has been called by Professor Conn, "One of the profoundest mysteries."

We can all see that if heredity were the only factor in the perpetuation of species, that absolute uniformity would result—the offspring would be exactly like the parents, and change, development, progress and evolution would be impossible. So that in trying to answer this question of why offspring are unlike their parents we are seeking the foundation bed and the stepping-stones of evolution.

Within the past ten years much investigation and experiment has been undertaken in this field, and most all these students have decided that the explanation of variation is closely connected with the phenomena of sex.

While it is true that among some of the lower orders nature has revealed no evidence of differentiation of sex, and that even in some of the higher species, some insects and some frogs, no signs of sex organs exist, yet these seem to emphasize these rules, for outside these few exceptions the phenomena of sex is universal among living organisms.

We have been wont to associate sex with the functions of reproduction, and to consider it the essential part, but we now know, strange as it may appear, that sex differentiation has no direct or necessary connection with reproduction. The one thing that is sure about reproduction seems to be that it is always a process of division. In the lower orders the parent divides into two equal parts, each of which grows into an individual; in higher orders the two divisions are unequal, and the smaller grows into an

organism like the parent. Growing plants from slips is a well-known example of this method. Among the highest orders reproduction is attended by division, but the parts are very unequal, the one being very small, and the other composing the whole of the remainder of the body. These small parts are of two kinds, the female part or egg, and the male part or sperm, and each is a cell which seems to be a condensed epitome of the individual of which it is a part.

The next step in this process is one of union. Take two "epitomes," fuse together, and a new individual is developed from the fused mass. This would produce an individual with double characteristics were it not for the fact, recently proven, that each one of the cells, the male and the female, just before its union, throws away a part of its characteristics in order to make room for those coming from the other.

Commonly this phenomena of "exchange of characteristics" is associated with reproduction, but in some unicellular organisms like the paramecium it is not. In this type the animals come together and interchange material and then separate and continue their life, and the whole process seems to have nothing to do with multiplication. This union of cells, independent of reproduction, is rare, but since it occurs, it seems to prove that sex interchange of material is not necessarily connected with reproduction. Conversely, as has been seen, the phenomena of multiplication is not necessarily connected with sex.

On the other hand, the fact that sex differentiation is so universal among animals and plants is sufficient to emphasize the fact that it must subserve some very important purpose, and if it is not essential to reproduction, what purpose does it subserve.

In a recent article in *The Independent*, Professor Conn, teacher in biology at Wesleyan University, has said:

"There is a growing conviction that in some way this phenomenon is closely connected with the appearance of variations. If so, the whole evolution of the animal and vegetable kingdom is, in a measure, based upon sex. The suggestion of a connection between variations and sex phenomenon is a natural one, for sex union quite easily explains the appearance of variations. If an animal divides itself into two parts, each of which becomes a new and independent individual, it is quite natural to assume that the two individuals would be alike. If the animal divides into many pieces, each of which has the essential characteristics of the



parent, it is natural to assume that the individuals thus resulting shall be alike. If a star fish should divide itself into ten thousand pieces, one of which is the original adult, and the others are eggs which contain the characters of the adult concentrated into a single cell, it is again natural to assume that the pieces shall be essentially alike, and that, if the ten thousand eggs developed into whole independent individuals, they would be all like the parent and all like each other. In a word, then, this phenomenon of multiplication by the universal process of division gives us a partial explanation of the facts of heredity, since it explains why the offspring resemble the adults.

Quite different would it be when each of the eggs of the star fish which contains the characters of the parent should, before it grows into an independent individual, throw away half of its characters and receive an equivalent quantity from a second individual. When this occurred it is quite manifest that the individuals that result from the combined cell would no longer be exactly like the individuals that produced either of the cells which thus united. It would contain part of the characters of the individual that produced the egg, combined with some of those of the individual that produced the male cell. The result will be that the offspring coming from an egg which had thus united with a male cell would be like neither parent, but different from both. In other words, the ten thousand offspring of the star fish, resulting from the ten thousand eggs which had united with ten thousand male cells from other individuals, would not be all alike, but would, perhaps, show ten thousand different variations, resulting from differences in the origin of the individual cells which united together. We have in this union of the sex cells a cause of variation among the offspring, and we should expect to find that this form of multiplication would give rise to animals which would show great variations among themselves.

Thus it is that the phenomenon of sex differentiation and the union of sex cells furnishes a simple and a natural explanation of the appearance of variations among animals. There is a growing belief among biologists that this explanation at least approximates to the truth, and while there are some facts which are yet unexplained by this simple suggestion, there are many others that fall into line with the theory advanced so closely as to convince biologists that this suggestion contains a truth, even though it may not be the whole truth. If the view

thus advanced be a true one, we see at once the great significance in nature of this universal phenomenon of sex differentiation. It is the foundation of variation among animals and plants, and, inasmuch as evolution in general is based upon variation, we see thus that this phenomenon of sex differentiation, running through the whole scale of nature, from the microscopic cellular plant to the highest plants and animals, is the foundation of the evolution of the animals and plants which has characterized the history of nature. We see, too, that we must look upon sex differentiation in animals and plants not as an essential feature of reproduction, for a reproduction is perfectly possible without it, but as a means adopted in nature to introduce the endless variety which characterizes living organisms."

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### Reviews.

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A PRACTICAL MANUAL OF INSANITY. For the Student and General Practitioner. By Daniel R. Brower, A. M., M. D., LL. D., Professor of Nervous and Mental Diseases in Rush Medical College, in Affiliation with the University of Chicago, and in the Post-Graduate Medical School, Chicago; and Henry M. Bannister, A. M., M. D., formerly Senior Assistant Physician, Illinois Eastern Hospital for the Insane. Handsome octavo of 426 pages, with a large number of full-page inserts. Philadelphia and London. W. B. Saunders & Company, 1902. Cloth, \$3.00 net.

No graduate in medicine is thoroughly equipped to practice his profession unless he be acquainted with at least the rudiments of the science of psychiatry. Broad though its domain, and difficult of mastery, yet everyone may readily acquire knowledge of those principles upon which depend a successful treatment of those cases of mental disorder that form a part of every physician's practice.

This work, intended for the student and general practitioner, is an intelligible, up-to-date exposition of the leading facts of psychiatry, and will be found of invaluable service, especially to the busy practitioner unable to yield the time for a more exhaustive study. The work has been rendered more practical by omitting elaborate case records and pathologic details, as well as discussions of speculative and controversial questions. Certain special features of the work, also broadening its field of usefulness, are the mention of the forms of insanity not usually met with in hospitals, and the including of a comparative table of classification and a chapter on some of the ethical questions relating to insanity as they may arise in the



practice of medicine. Indeed, we know of no work of its scope that covers the field so completely, yet concisely and clearly.

One of the most practical parts of the book are the chapters treating of the examination of persons supposed to be insane, and the ethics of insanity, and they contain facts and instructions which every practitioner will find necessary and valuable. A full index adds much to the usefulness of the work.

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**MORPHINISM AND NARCOMANIA.** Morphinism and Narcomania from Opium, Cocain, Ether, Chloral, Chloroform, and other Narcotic Drugs; also the Etiology, Treatment, and Medicolegal Relations. By T. D. Crothers, M. D., Superintendent of Walnut Lodge Hospital, Conn.; Professor of Mental and Nervous Diseases, New York School of Clinical Medicine, etc. Handsome 12mo of 351 pages. Philadelphia and London. W. B. Saunders & Company, 1902. Cloth, \$2.00 net.

The alarming increase, in the last few years, of morphomania and the associated various narcomanias imperatively demands immediate attention by the medical profession. Every year the increasing prominence of this psychosis calls for more exact studies, with a fuller recognition of the conditions and causes of the disease. Medicolegally, questions of responsibility have been asked with increasing frequency, and there has been no literature and no study of the subject to afford an intelligent answer until this present volume was initiated.

The special object of this work has been to group the general facts and outline some of the causes and symptoms common to most cases, and to suggest general methods of treatment and prevention. The object could not have been better accomplished. The work gives a general preliminary survey of this new field of psychopathy, and points out the possibilities from a larger and more accurate knowledge, and so indicates degrees of curability at present unknown. The author shows his absolute familiarity with his subject in the clear, concise, and in every way admirable work which he has given to the profession, whom he has placed under merited obligations.

Though a few books upon this subject have appeared in foreign literature, and some of these have been translated into English, yet this book is an important addition to the literature of this subject, and is one of which we need not be ashamed. Not alone are the subjects exhaustively treated, but the style and the manner of treatment are both scientific and scholarly. The book is printed on excellent paper, in large, clear type, and is handsomely bound.

**BLAKISTON'S QUIZ COMPENDS.** No. 15, Compend of General Pathology, by Alfred E. Thayer, M. D., with 78 illustrations, several in colors. Published, 1902, by P. Blakiston Son & Co., Philadelphia. Price, 80 cents net.

To those in need of acquiring the principles of pathology this book will prove a valuable aid. It is well arranged, full, clear, concise and "up-to-date." Students and practitioners who have little time for study will be able to post themselves in this branch by the help of this small book. The compend is judiciously illustrated, well indexed, and the price is reasonable.

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**THE INTERNATIONAL MEDICAL ANNUAL.** A Year-Book of Treatment and Practitioner's Index. 1902, Twentieth Year. Published by E. B. Treat & Co., 241-243 West Twenty-third St., New York. Price, \$3.00 net.

If this annual had not met a need and found patrons it could not have continued for twenty years. Of the lesser and cheaper annual digests this is one of the best, and in its present arrangement it well covers the yearly progress in medicine.

In the twenty years of its existence this Year-Book has been gradually enlarged from a book of 300 pages to one of almost three times that number, and during all this time many practitioners and students have found it a great help in keeping abreast of the times.

The essays by specialists on topics of current interest have always been a feature of this annual, and they add much of value to the twentieth volume.

The book is illustrated by many plates, charts and diagrams, the subjects treated are arranged alphabetically, so as to be readily accessible, and a full index makes any subject easily available.

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**MANUAL OF CHILDREN'S NURSING, WITH NOTES ON INFANT FEEDING.** By Charles Jewett, A. M., M. D., Professor of Obstetrics and Diseases of Women in the Long Island College Hospital. Fifth Edition, Revised and Enlarged. Published, 1902, by E. B. Treat & Co., 241-243 West Twenty-third St., New York. Price, 80 cents.

This small book contains all that it is essential for the trained nurse to know of obstetric nursing, and it is written in clear and concise language.

The author has had a large experience, both as an obstetrician and a teacher, and is consequently well fitted for the task he has undertaken.

In the present edition the book has been entirely re-written, and several additions made, so that it well fulfils its aim of aiding

nurses in remembering the most important practical teachings of her hospital training.

The manual ought to be of service not only to nurses, but to mothers and all interested in the subject treated. The book is well printed and the price reasonable.

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## Correspondence.

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*Editor Journal of Medicine and Science,  
Portland, Maine,*

Dear Sir:—I find in the *Journal of American Medical Association*, an abstract of an article credited to your JOURNAL, entitled, "An Operation for Ventro-suspension of the Uterus and Ovaries," by W. L. Cousins, M. D., the technic of which, so far as I can see, is identical with that of an operation which I devised in 1899 and reported in the *American Journal of Obstetrics*, March, 1900. I have since published it in different medical journals, have reported it in a number of medical societies, national and local, and there have been a great many abstracts published all over the country. I enclose a reprint giving the technic of the operation as first devised, and one of later date giving modifications. I have been written to by several surgeons who had fallen upon substantially the same technic without previous knowledge of my operation, all of whom gave me credit for priority. Doubtless Dr. Cousins had not learned of my operation and the technic was original with him. It only goes to show that the operation is logical, and the rapid and extensive endorsement it has received at the hands of the profession corroborates this view. I congratulate Dr. Cousins and can assure him from extensive experience with the operation that he will not be disappointed in it.

Very truly,

D. TOD GILLIAM.

March 15, 1902.

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## Selections.

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### The Young Physician.

By EMIL AMBERG, M. D., of Detroit, Michigan, Secretary of the Committee on Uniform Medical Legislation of the Conference of the Committee on National Legislation of the American Medical Association and Affiliated Societies.

"Conscience is the law of laws."—Lamartine.

The Present Medical Conditions are Unhealthy.

The medical literature of our age bears witness that clouds are gathering on the pro-

fessional horizon which must create in every physician gloomy views about the future. It is natural, as proved by history, that the interests of individuals, though they may be strictly within the law, will sometimes place a whole class of men in a position which cannot be recognized as healthy and in accord with the general welfare, even when viewed from a moral standpoint by the individual members of the privileged class themselves. History shows that under these circumstances the moral law exerts its right with irresistible power and declares unlawful today what has been regarded as lawful yesterday. More and more the principle is recognized that the individual who forfeits his right forfeits the right, which principle has been so excellently expounded by the great teacher Jehring.

The status of the medical profession in our country of today will, I hope, in the future be understood and excused only by virtue of the historical method. There is nobody more proud than I of the illustrious achievements of our own medical men; but unfortunately we have today an oligarchic state of affairs. I am speaking of the great majority and try to compare in my mind the medical conditions of today with the state of affairs which could exist if medical matters were arranged according to the intellectual and moral standard of well-educated and conscientious American citizens. It is not my intention to take up your time with generalities; I shall try to remind you of a few facts, known to all of us, which show that it requires only some good-will to make great advancement. I cannot demonstrate this fact better than by speaking of the young physician who starts to practice medicine.

The Young Physician Confronted With Conditions Caused by the Overabundance of Medical Colleges.

After the young man has received his diploma he may or may not become an interne in a hospital, or he may travel, in order to add to his knowledge and skill. After a little time he will settle down to practice, or rather, he will try to do so. Wherever he may look for a location in our country he will immediately be confronted with the fact that there is very little room for him. I am speaking of general and not of exceptional circumstances. That there exists an illegitimate over-production of physicians in our country only ignorance can deny. Who is responsible for this state of affairs? We read in the *Journal of the American Medical Association* of July 27th, page 270, in part:

"Our 160 medical colleges, however, turn

out annually a crop of nearly 6,000 graduates, or over 2,000 more than can thus be provided for.

"It is certain that the multiplication of doctor factories has gone far enough in this country, though, as yet, it does not seem to have been checked."

A young man entering a medical college should have proved by his record that he is able to undergo the hard study of medicine. Is this always the case? Dr. Henry Beates (see *New York Medical Journal* of August 10th, 1901, page 200,) says:

"It is the commercialism of the medical schools that is the cause of so many rejections. The papers of this examination prove clearly that the medical colleges continue to admit students who are utterly illiterate. The students cannot pass even the simplest rudimentary examinations, and to them medicine is a study entirely beyond comprehension. Just so long as these colleges admit men of little or no preliminary education there must be a large percentage of rejections when they take the board examinations. I wish to say, emphatically, that the granting by a college of diplomas to such men is a fraud."

#### Medical Colleges Responsible to the Public and to the Physicians.

The college faculty, to some extent, is morally responsible in two ways: 1. To the community. 2. To the student. The community expects a medical school of today to furnish only physicians able to fulfill their duties properly.

The student who places his whole future, practically, in the hands of the faculty must expect to be able to make a decent living afterwards. The medical schools of today have a great influence in this respect.

In the announcement of a medical college for the session 1901-1902 we read in part: "Nearly all the medical colleges in the United States are now associated in four separate organizations for the purpose of raising the standard of medical education. One of these, the Association of American Medical Colleges, embraces the majority of the regular medical schools in good standing, and, while it possesses no licensing power, it exercises, nevertheless, a potent influence upon the future career of graduates."

Until we see still more of the results, we must keep in mind what the committee on organization, of the American Medical Association, said in their preliminary report (*Journal of the American Medical Association*, May 25, 1901, page 1441,): "The

physicians connected with the medical colleges organized some time ago a medical college association, and this body has done much good, but it is realized by those connected with it that it has failed in some of the important measures it undertook to carry out."

The mere fact that a medical college belongs to the Association of American Medical Colleges is not a proof of its sufficiency. The medical boards cannot conscientiously recognize the College Association. This could only be the case if a permanent joint committee would continually inspect the colleges. On the other hand, we should keep in mind what Dr. Albert R. Baker, ex-president of the College Association, says: "As long as we have forty or fifty examining boards, many members of which are appointed solely as reward for political service, there will be need of watchful oversight."

We know that the medical faculties of our country, who control the output of the material, have been so thoughtless in their conduct that the young man finds little room for work. It is easily understood that great harm is done thereby in various ways. The young physician's ability is diminished through lack of exercise. Undoubtedly he loses some of his training and the community is a direct sufferer, because the services rendered by the young man cannot be so good now that he has become rusty. That science is a loser need not be mentioned. We all know how discouraged these young men become, and to what means they take recourse to keep themselves above water. The ideal side of our calling is lost sight of under such circumstances. The medical autocrats, the college professors, the *beati possidentes* thrive anyway, but the young doctor almost starves. It would be well to establish living insurance companies for young physicians as we have life insurance companies.

Dr. Philbrick, in an article in the *Journal of the American Medical Association*, of June 15th, 1901, says, in part:

"Medical colleges exist far in excess of any public need. Like the country store, which doles out inferior wares at every cross-road, a so-called 'Medical College' is found in almost every town of generous size; and to obtain a medical degree is within the possibility, intellectual and financial, of any youth, however lacking in mental and moral fitness." "In the majority of cases they possess few facilities for demonstration, are located in towns where there is not a sufficient number of dependents to furnish requisite clinical material, and generally have as instructors men of mediocre or less ability."

"Professional welfare is not a desideratum in the founding of most medical colleges, they being merely reflectors of personal ambition."

"So irrationally have medical schools been established in our large cities that it is recognized by sociologists and charity workers as one of the most potent causes at work to undermine the sense of economic independence and self respect in the community. The clinics must be filled; hence the ability of those seeking relief to pay cannot be questioned." "Not alone are the laity pauperized; the young practitioner walks long and wearily in the borderland between inanition and starvation. My statements are facts, not fancy."

Dr. A. N. Ellis, in the *Cincinnati Lancet-Clinic* of August 24th, 1901, says in part:

"I have heard a great deal about there always being room at the top. I don't believe a word of it. I know lots of young men of skill, learning and industry in the city of Cincinnati, who do not make a decent living, and why? Because the supply exceeds the demand."

It is imperative that steps be taken by the people and by the well-meaning members of the profession to remedy the abuses by early and energetic action.

#### Reciprocity and Uniform Medical Legislation.

The communities are beginning to apply vigorous remedies through the medical boards. Only recently the importance of Medical Examination Boards has become more recognized. They are now pretty well established in their own divisions and by the universally demanded reciprocity between them the requirements will become more stringent until uniformity is reached. Reciprocity is not dependent upon the will of the boards, because the boards are only the executors of the will of the people. As soon as it is understood that the life of a citizen in one political division is worth just as much as the life of a citizen in another, and as soon as the very simple deductions from this principle are made by the people who are most concerned, a change must come. It is only natural that divisions which are medically equally strong will form groups. Reciprocity furnishes the means of raising the standard of medical education, of making it uniform and of doing away with illegitimate over-crowding. Over-crowding in itself is at present beyond our control, but the fact should be emphasized that we should and can prevent illegitimate and fraudulent over-crowding. What a deplorable law exists

even in Massachusetts, where a man can be admitted to examination for the State license who has not graduated from a medical college. It will be absolutely necessary that in the future, in nearly all political divisions, the State Board of Health and the State Examining Boards form two distinct bodies, and that, as a rule, no physician shall hold office in both Boards simultaneously.

The question of reciprocity and uniform medical legislation is inseparably connected with the national welfare and will stand so long before the people and the medical profession until it is solved. The approval of reciprocity and uniformity by almost every intelligent physician must be acknowledged with satisfaction.

It is the young physician of today who is necessarily the most interested in the question of uniformity, because, according to the laws of nature, the future belongs to him. The gray-haired members of our profession, however, who still possess young hearts, will be with us.

#### Medical Schools Must Become State Institutions.

The tyranny exercised by so many medical schools over the medical profession must first be broken by united efforts before we can speak of the independence of the medical profession in the United States. Paternalism of the worst kind must be overcome. The medical profession is strong enough to act; we should not be intimidated by remarks to the contrary. The people will stand on our side. If there exists the necessity for a combination in the form of a union, it should be a combination of physicians against the medical schools of a low standard. The standard approved of by the Association of American Medical Colleges cannot be accepted as sufficiently high. Medical schools should be state institutions, and special privileges should not be enjoyed by private medical school corporations. Institutions of the character of medical schools are too important a factor in the constitution of a nation that any community can afford to give the control over the same to private parties, however trustworthy they may be. No state, for example, would dare nowadays, to entrust to a corporation the right to form an army and to carry on a war. The sound mind of the people I hope will in time remedy this abuse of a personal liberty in a free country. There does not exist the least doubt in my mind that private medical schools before long will not be tolerated. So far as the profession is concerned, we may say that the Declaration of Independence of the med-

ical profession has not yet been pronounced. The most important part of it will read: "Medical schools shall be state institutions."

If it should be the case that the American Medical Association cannot act, I think it would be advisable that the independent members of the medical profession form an association of their own. However, I hope this step will not be necessary.

Many of the medical schools have acted to their pupils, and later physicians, like stock companies which have watered their stock. They did so by turning out many inefficient men, increasing the number of so-called physicians, who, rather unscrupulous in their methods, help to make the medical profession of today appear in the eyes of the public as resembling a diluted and rather unreliable mixture. That such a proceeding is detrimental in every respect need not be dwelt upon. It lowers the professional standing, it prostitutes science and introduces a commercial spirit which no code of ethics can successfully combat. The code of ethics has become almost powerless nowadays.

#### Commercialism and Advertising.

What does the young physician do in order to succeed in his chosen profession? If he has means enough to spend two to six years in his office in practically solitary confinement, he may expect to succeed. Others travel for pharmaceutical and other concerns and give up their professional career. The young man who sticks to his calling is sometimes obliged to call the attention of the public to his existence as a medical man by resorting to ways and means which are entirely unprofessional.

Only recently we read that a young physician in Michigan accepted the position as community doctor for two hundred and forty families, at the rate of fifty cents a month per family. If such a plan is carried out in other places, and under present conditions, we may soon expect to hear that other physicians will take care of a certain number of patients if their office rent, board and laundry bills are paid, and if they receive some pocket-money. Many physicians nowadays will be glad to work under such, or worse, conditions, and I do not blame them. That the public will be the ultimate sufferer if such a procedure becomes popular need not be mentioned. We know that in a foreign country just such a state of affairs has led to much trouble.

A peculiar movement was started in one city when an association was intended to be formed by the aid of which some thought

thumb-screws could be put on the patients. It had been entirely forgotten that the overcrowding of the medical profession is the cause of so many evils, which cannot be corrected by squeezing the public in any such manner. It requires, however, action to go at the root of the evil. Renan says: "In morals, like in art, talking is nothing, doing is everything."

So much is said about advertising, especially about the advertising of one's specialty. How eager are some specialists to prevent a young man from becoming known as a specialist, and yet, time and again, do not the same men have the attention of the public called to their specific calling, in college announcements, hospital reports, and in other ways? Sometimes a great indignation is expressed when a physician's name appears in the daily press, and yet often we are obliged to think that most physicians decry the appearance in the daily papers of a physician's name only if that name does not happen to be their own.

Furthermore: Does there exist a commercialism more pronounced than that exhibited by some oculists, who procure eye-glasses for their patients and then sell to them at an advanced price? Such a procedure works harm in both ways: First, it degrades the profession, and, second, it is deceiving by making the world believe that the specialty is so very successful in itself, whereas, it seems to be so sometimes only by taking refuge in commercialism. I do not blame the individual oculist; I only want to show what fruit grows on the tree of overproduction. It has gone so far that nowadays we frequently must not speak so much of the "survival of the fittest," but of the "survival of the shrewdest."

No one can learn to master a specialty in a few weeks. It should be required that a man, before he is allowed to practice a specialty and make such known, should give proper evidence either to the State Board or to some recognized medical society, that he is entitled to it. It would be of great interest to learn how the many eye, ear, nose and throat specialists acquired their knowledge and received their training, especially in the latter mentioned specialties. It is absolutely impossible that these specialties can be learned out of books, and it is imperative that thorough and personal instruction is received in these branches like in any other, in order that the mistakes which experience learned to avoid are not made over again. This can only be reached by actual training. That we have, in this

respect, room for much improvement must be admitted.

How frequently has the attention of the medical profession been called to the lack of respect exhibited in the court-room when a physician is called upon to give expert testimony, and how often has it been admitted that this lack of respect is merited to a great extent. A lack of confidence in the medical profession is amply shown by the fact, as Dr. McClintock remarks, that drugs were purchased after physicians' prescriptions to the amount of ten million dollars within a year, whereas one hundred and sixty million dollars' worth were bought directly by the public.

**Our Hope Rests with the Re-organized American Medical Association.**

The laity and the medical profession are beginning to realize that modern medicine should be based on solid ground, that it must be studied systematically, and that it requires the whole energy, perseverance and time of its well-trained exponents. Only by devoting practically his whole time to professional work will the average physician be true to his calling. Our possibilities are limited according to the nature of men and things. It is inhuman to limit them still more by unprofessional methods.

The field of medicine becomes larger every day. Thorough training in physiology and pathology becomes more and more recognized as indispensable for correct and independent thinking in medicine. The means which lead to a differential diagnosis become more exact. Preventive medicine has become the pass-word of our time. The methods of treatment embrace means hitherto only little employed. A greater familiarity with psychology, hydrotherapy, massage and gymnastics, and their proper application, will quickly diminish the number of faith healers and osteopaths and strengthen the confidence of the public in the profession. Thorough training in a professed specialty will more and more be insisted upon. May the young physician quickly adapt himself to modern demands. He is more free to act because he is not so much hampered by tradition and old associations.

At present the future of American medicine lies in the hands of the House of Delegates of the American Medical Association. Great responsibilities are placed upon the shoulders of the Delegates, who are confronted with serious problems. The endorsement of the plan of re-organization of the American Medical Association, at the meeting at St. Paul,

awakens great hopes. Medical education, medical legislation and reciprocity have been mentioned as essential parts of the work before the new body. May the Delegates find a solution in the near future, and may they feel sure of the assistance and co-operation of every clear-minded and well-meaning physician in this our great country.  
—*Philadelphia Medical Journal.*

**The Ultra-Fashionable Set in American Society.**

By C. W. DE LYON NICHOLS, Ph. D.\*

Strange to narrate, in our free, democratic United States, almost within a decade, there has sprung up an exclusive social caste as valid at certain European courts as an hereditary titled aristocracy—a powerful class of fashionable multi-millionaires, who, at their present ratio of ascendancy, bid fair in time well nigh to patronize royalty itself. The approaching relations of this ultra-fashionable set to the new social administration at the White House, and the consequent innovation there of large private receptions by card interspersed among its official levees, are already stirring up one of the mooted little questions in political circles, as well as among the leaders of the so-called *haut monde*.

This all-powerful social trust, the ultra-fashionable set in American society, means in reality a combine of not more than four hundred families scattered through a very restricted number of cities of the republic. New York City, notably Newport-New-York, contributes a large quota of these coroneted families of the republic; Washington, half a dozen to a dozen in the winter season, not inclusive of the diplomats, who are decreed by fashion *persona grata* the world over; Boston and Philadelphia, three or four families each perhaps; Baltimore, four; San Francisco, three; Virginia, one; Chicago, two; Providence, four; North Carolina, one; South Carolina, one, and the entire State of Connecticut only two, and these practically summer residents from New York, of whom one family has not for two seasons occupied its hereditary Fairfield County villa, built Italian fashion, with stiff formal flower gardens; and the territorial prestige of having the other of these families as denizens is laid claim to by two rival summer colonies, Greenwich and Stamford.

\*Dr. Nichols is the author of "The Greek Madonna" and "The Decadents," both novels of the ultra-fashionable set that were widely read in this country and Europe when they appeared a few years ago. He is himself a member of society and a familiar figure at Newport for many seasons.



The principal ingredient entering into the composition of this big social trust is wealth; still, some of the most opulent families on its lengthy waiting lists will not be deemed acceptable as members without undergoing a tedious apprenticeship, with a possibility of repeated failure. A family equipped merely with unabsorbed riches needs to get into its second generation on as short notice as possible. In the meanwhile, it may be found imperative for its members to forsake fatherland and kindred and become wanderers over the face of the earth, especially that insular section of the globe laid down on the maps as England, before these aspirants can be adjudged presentable to the one and only smart set of their native republic. Across the Atlantic Ocean, via London, a rather circuitous route from New York to Newport!

That Newport and Newport-New-York society is the most difficult of *entrée* of any on either side of the Atlantic is now almost a truism to observe, the element of caprice in its standards rendering its requirements puzzling. Known to any *habituée* of Newport is a whole group of families of national repute, who have been serving a probation for years at Newport, without being able to penetrate more than half way into the inner circle, although aided and abetted by millions in hard cash.

With reference to wealth as a *cachet*, paradoxical as it may seem, in this social exclusiveness we are describing, families are moving whose total assets of this world's goods and chattels would not foot up to half a million dollars, but the majority of these exceptional instances in the last analysis are found to consist either of celebrated colonial houses, which have had wealth enough transmitted all along to keep fashionable, or of persons related to powerful multi-millionaires of the new order who have already crossed society's Rubicon without having fallen victims to that peculiar form of ossification diagnosed in Newport as the "marble heart."

However, the abstract fact of blood relationship nowadays signifies little with clans of plutocrats imbued with scarcely any real family spirit. As a social leader remarked to me the other day, "In New York and Newport you can no longer ram one person down another person's throat because he or she chances to be a relation." Furthermore, both of these somewhat anomalous members of the smart set—the old family struggling to keep above ground and the parasite relation of the *nouveau riche*—stand in almost hourly danger of being submerged by rival accumulations of wealth. So a kinswoman

in moderate circumstances, a short time ago, bewailed her fate in adverting to one of the most fashionable and exclusive entertainments given in the annals of the metropolis: "I never felt so utterly alone in the world as I did at my aunt's ball."

Wealth, then, allied to a certain chain of fortuitous aids, such, for example, as a big business deal benefitting one or more votaries of the ultra-fashionable set, or a fortunate marriage, or a brilliant trans-atlantic social career, meteoric though it may be, form some of the stepping-stones to social preferment. But these adjuncts to wealth, as the main entering wedge, it must be reiterated, are capricious in their effects, at times making Cassandras of all social prophesies. A woman may, for instance, be blackballed from admission into the smart set solely for the reason of her moral character's falling short of the degree of rectitude exacted, while within the charmed circle itself several cynosures, with equally as *risqué* a past, or present for that matter, may be disporting themselves amid at least the virtual plaudits of the ultra-fashionable.

But charity covers a multitude of sins, and many of our noblest charities are fostered by patronesses from the ranks of the smart set in society; and this same much-praised and lampooned coterie, although in their country-house life they depend upon house parties from a distance and have practically nothing to do with "neighbors," often head subscription lists for charities or public improvements in those localities.

Although a limited few may use charities and church activity as a cloak for immorality, still one must not overlook the fact that in the ranks of the immortal four hundred families of which we are essaying a pen picture the majority are persons of conservative morals and unaffected good churchmanship. How this safe, conservative body of individuals is able to reconcile the discrepancies in conduct of the rapid and dissipated segment of the smart set affords one of the most delicate and baffling problems in casuistry of the opening of the twentieth century.

Such a generalization or definition of the big social trust as the caption of our article lays down would not have been possible ten years ago, because it would have been split up into the disjointed social sets of various cities. But within a decade New York has been making prodigious strides in absorbing the individuality of the other cities of the Union and drawing their representative people to the metropolis, at least during the gay portion of the season; and what is not



accomplished in that way in town is achieved by Newport, New York's summer Mecca. The rich, untamed Westerner is descending upon us as the Huns and Goths descended upon the mistress of the ancient world.

The contrast in manners, dress and conversation between a New Yorker and a denizen of a provincial city like Boston, or Philadelphia, or Chicago, for instance, has become as pronounced as that between a Parisian and a person coming from the provinces in any of Balzac's novels, or in real life. The faces of our good Americans from the provinces discharge themselves of expression somewhat, upon entering the Waldorf-Astoria for the first time; they feel a little heady, and those people who have been the most important and overbearing dictators in their own towns weaken the most when the metropolis has really struck them. And as to the ultra fashionable set, of which they have heard so much, it is to them a unique and distinct creation of Almighty God or the devil—they are perplexed to know which—for they seldom get further than the oracles of the newspapers or *Town Topics* in dissection of these illuminati themselves.

The protest, on the other hand, that a family does not care for society, which is sometimes set up as a cheap defense, can seldom be relied upon as true, for the average American multi-millionaire, if possessed of a modicum of social talent and a predilection for society, does not rest content until he has gone to Newport to be crowned, to London to have the coronation confirmed, and perhaps to bring back a real live title in the shape of a son-in-law, later, perhaps, to have the family arms further blazoned by an international divorce suit.

Mrs. Van Rensselaer Cruger, the novelist of the *par excellence* American ultra-fashionable set, says in "Poppæa," that by the socially ambitious even corpses will be used as stepping-stones. To such indefatigable aspirants with American shekels to incinerate, London and Rome offer great emoluments. Let a multi-millionaire family from the States, not sufficiently well placed, go to Rome for the winter, not failing to stop at the Grand Hotel, the resort of the smart set in the Eternal City. Certain Americans of that category will not go down to Egypt for the winter—they may have heard a rumor of the plague—and need to be amused in Rome, and are consequently ready to unbend. Seize your opportunity. If an Episcopalian, be sure to make the acquaintance of the rector of the American

Church in the Via Nazionale; dine him and give liberally to his parish. Offer incense to your ambassador, for more of the American smart set attend an ambassador's receptions in Rome, where there is less going on, than in other cities; but do not ask him for a court presentation, unless sure of your ground, for he is allowed only six of these in a year. Get introduced at the Palestra on the Quirinal Hill; cultivate, above all, the hunting set. Lay seige to the palace of Hayward, the honorary Papal Chamberlain, who receives groups of smart Americans in great state, regardless of creed. But in the main, affiliate with the Whites instead of the Blacks, for the exclusive American coterie who tarry in Rome, as well as those who stay at home, are nearly all Episcopalians and side with the Quirinal against of the Vatican. Even a personal audience with the Sovereign Pontiff himself will not further your social campaign in the least; an hour passed at a levee at Honorary Papal Chamberlain Hayward's palace will accomplish manifold more. If you have prodigious sums of money to spend, you might hand over a check to the King of Italy to have the carnival on the Corso restored that season; or should you chance to be a Catholic, you might donate to his Holiness Leo XIII an amount sufficient to gild the dome of St. Peter's. Either of these investments would make one talked about throughout Europe and positively assure social success abroad.

On the return trip from the grand tour stop over at Paris as a sort of way station, and do a good deal of shopping, but bear in mind the Faubourg St. Germain is not bought with a price like Mayfair and Piccadilly. Push on to London for serious work, and in order that you and your family may play the role of the climbers with success adopt above all the tone of the commercial spirit. If the family tree at home be ridiculously insignificant, stand firmly in your shoes, for in that respect all Americans are equally ignoble in the eyes of the English. But avoid and shake from yourselves as vipers "detritmental" Americans. The society reporters can tell you in a jiffy who they are. Don't waste time hunting for returns from hospitality extended to Englishmen in America, but study how you yourself can subservise some influential Britisher's present needs.

Put an advertisement in the newspapers, if the desideratum can't be obtained by other means, offering handsome remuneration for the services of a reduced woman

of title, but of exalted social position, as a coach in the proprieties for your wife and daughter, and in return for the benefit to accrue from her visiting list. Entertain lavishly; you are supposed to be stopping at Claridge's and not at the Cecil. Put yourself in the way of assisting more of the nobility. Go into partnership in some sort of business with them, if necessary. Your compatriots will have less to do with you in London than in Rome—it is nearer home. But say nothing; go ahead and outshine them; astonish them with the list of nobility present at your dinners. Give out checks right and left to English newspaper reporters, and above all, to American journalistic correspondents, if they will accept of them. Send in to headquarters a subscription to help along the war in the Transvaal.

Should any Englishman have the bluntness to give vent to surprise at your not knowing certain fashionable New Yorkers in London, assure him your family has been in mourning for years and years, and your wife an invalid the rest of the time. As you are extremely wealthy and entertaining galore, your ambassador may at length succumb to a court presentation. The late Queen Victoria's favorite godson, the son-in-law of a famous Earl, whom I recently visited at Windsor Forest owing to ties of family connection, told me that "an era of unprecedented extravagance had set in of late in English high society." Now this state of things is directly due to the social invitations and habits of the American plutocrat; so much the more powerful incentive he has, then, for storming Newport by first capturing London.

Upon your return to the States, in a quiet way, yourself and family must apparently be sighing with Alexander the Great, that there are no more worlds left to conquer. To divest this mental attitude of yours of figures of speech, you must impress your compatriots by your manner that you have nothing either to gain or lose socially. But in reality you have a *coup d'état* to perform—a court presentation to secure fully as difficult as a European one—not at the White House, but at Astor Court. Not to have dined at the Astors' virtually debars one from any sort of leadership in the exclusive set, to say nothing of social registration among the one hundred and fifty conscript families of the New Republic's Almanach de Gotha. Even for enrollment among the nation's four hundred elect families before adverted to, one must at least have received an invitation to an

Astor ball. It would be far from the truth and an act of rank injustice even to intimate that the Astor family in any way caters to leadership or swaying of scepters of any sort. At the same time this exalted position is accorded them by both the tacit acclamation and etiquette of the combined social trust of the United States. Two houses have existed in New York City, with corresponding cottages at Newport, which have practically been resorted to as the paradise of social climbers. The one of these is extinct; the other, both in town and at Newport, decidedly on the wane—that is, less and less frequented by the smart set. So that aspirants for the higher social honors will now have to resort to the methods of lavish display and business tact and *finesse* prescribed for the London campaign. Better by far than any of these other maneuvers is a marriage outright into the exclusive set, which every now and then can be effected for a sufficient price. This a *fait accompli*, the other members of one's family can gradually be introduced, provided they are willing to enter into the thralldom. When safely arrived within the outer circle of the innermost elect, your social sponsor, as likely as not, will insist on naming your entire list of guests for your entertainments, thus cutting off a score of intimate friends, perchance relatives, who have borne you upon their shoulders in the upward ascent. The dictates of harsh, unfeeling policy may compel you to throw them overboard permanently. Conscience berates you for ingratitude, but your mortified self-love does not exactly relish having these props and crutches upon which you have leaned in the day of struggle too plainly in sight of the new friends for whom you have bartered your independence.

In this new world, where like things are unlike, the portrait painter is seen to take precedence far above the man of letters. Scarcely any one in the smart set can write books without losing caste. Mrs. Van Rensselaer Cruger is almost the only ultra-fashionable woman who has been able to do so without peril of social ostracism. The average American society man, unlike the English nobleman whom he apes, has not sufficient education to converse with the eminent specialist or man of letters, and does not want him around. He classes authors with the penny-a-liner who writes personal and often satirical notes for the yellow journals, or with the society reporter whom he orders his servants to leave standing in the hall.

Ultra-fashionable life, to one who has not participated in its gayeties, might seem like a tissue of artificiality, but it is glaringly inconsistent, often surprising one by its naturalness and spontaneity. Still its devotees are hedged in by certain fixed conventionalities. One's visiting list must be rigidly revised from season to season, persons too much given to introducing new people must be dropped. In scanning the patron list of a charity the burden of inquiry must be who is on the roster, not particularly what are the merits of the philanthropy. Attendance at receptions and sending out cards for "days at home," must be generally tabooed, for to be seen much at the former is apt to imply that one has few dinner invitations, and this whole form of social entertainment is liable to expose one to meeting the *hoi polloi* of society. In going to the opera nearly the whole of the first act must be cut, for fear suspicion may be aroused that one has not dined elaborately. Evening calling and receiving of calls must be abolished, for going to the opera, giving a dinner or dining out is the *de rigueur* program for practically every night during the season in town.

The worst drawback to American high life of this type is the alarming prevalence of divorce. If a more highly developed degree of hereditary family pride restrained conduct, it might have a tendency to lessen the number of cases in which the law is invoked to terminate conjugal woes. A well-born Englishman or Frenchman will become a paragon of long suffering before consenting to the family name's being handed down tarnished by a divorce. The social attitude of one or two of our more lax prelates towards persons divorced on the old-time statutory grounds has furnished lampoons for various London periodicals.

In England the clergy of the Established Church are classed with the nobility, the bishops being Lord Bishops. With the American smart set, however increasingly English its social *convenances* from season to season, this old Anglican idea about the clergy, which obtained under the *régime* of the old Knickerbocker families, is rapidly disappearing. The increasing gayety of certain forms of social diversion tends toward making the presence of a member of the cloth at times hardly agreeable, and fewer of this somewhat lugubrious calling are bidden even to the dinners than of old. Like the relations of the physician to this stratum of our most highly organized society, those of the clergy are becoming more and more offi-

cial and mechanical, so to speak,—that is, to consist of burying, performing marriages and officiating at public services. But with hostesses powerfully affected with Anglomania the clergyman takes precedence before the physician socially.

Of titles purely ecclesiastical, although conferred only upon perpetual celibates, that of monsignor has always had a peculiar fascination for Newport hostesses, outclassing that of bishops, although few entertainers understand precisely what the title of monsignor means. But if certain of the smart set are mentally a bit hazy as to the spiritual province of monsignors, they have risen up in arms *en masse* on one point—they will no longer tolerate stupid sermons from any clergyman because his grandmother was a Van Rensselaer or his mother a Stuyvesant. One of Newport's gayest leaders, in company with her husband, systematically and habitually walked out of her metropolitan parish church during the singing of the hymn before the rector's dull sermon. The clergyman soon discovered it to be his bounden duty to accept a bishopric. The theological decrees of fashion are sometimes final!—*The Independent*.

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#### Sanguiform.

Sanguiform, a chalybeate tonic containing true organic iron, is referred to in the advertisement of Messrs. John Wyeth & Brother, appearing on another page. There is an obvious and well-known resistance to the absorption of the various salts of iron as ordinarily offered the physician, however soluble those salts may be, but when the inorganic state is rendered into an organic condition, it is then reasonable to believe that an advance step has been made, and an hitherto great obstacle to the applied usefulness of iron as a reconstructive blood component is overcome. In Sanguiform, iron is presented in organic form in complete combination with the other elements of normal healthy blood, and affords the physician the opportunity of prescribing for his patients a most valuable re-constituent in the most assimilable form.

Messrs. Wyeth & Brother solicit the correspondence of physicians relative to Sanguiform.

WORSE.—Gussie: "I heah when you awsked her to marry you she said she'd pwefer to have a pup."

Cholley:—"Not exactly. She said if she had to have a pup at all she pweffered a useful one."—*Philadelphia Press*.

## News and Abstracts.

THE AMERICAN ASSOCIATION OF UROLOGISTS was organized on February 22, 1902, essentially for the purpose of further development of the study of the urinary organs and their diseases. Although most of the founders of the Association are specialists in genito-urinary diseases, membership is not limited to those engaged exclusively in this specialty. Thus gynecologists, who embrace renal and vesical surgery in their work, are among the founders, as are also several gentlemen who devote themselves to the microscopy and chemistry of the urine, as well as a number of practitioners interested in the study of the kidney from a medical standpoint. The Association consists of active, corresponding and honorary members, and is in great measure modeled upon the plan of the Société Française d'Urologie, modified to suit American circumstances and conditions. Whenever possible, the branch associations throughout the United States, British possessions and Spanish America, will hold their meetings on the same evenings as does the parent association in New York (the first Wednesday in each month). The work of the Association is principally clinical, for the demonstration of new methods in the technique of examination and treatment. The annual meeting of the American Association of Urologists will be held on the last day and the day following the annual meeting of the American Medical Association. The officers of the Association are: Ramón Guiteras, M. D., President; Wm. K. Otis, M. D., Vice-President; John Van der Poel, M. D., Treasurer; Ferd C. Valentine, M. D., Secretary; A. D. Mabie, M. D., Assistant Secretary.

### A New Book.

The J. B. Lippincott Company announce a new edition of Rotch's Pediatrics. *The Journal of the American Medical Association* says of this well known book: "There is no branch of the practice of medicine of more importance than that which pertains to the management of children and the diseases to which they are subject. The physician who makes himself master of pediatrics will have a knowledge that will reach the heart, and assist him in obtaining the confidence of the most important member of the average family—the mother—and thus be the greatest aid in successfully establishing himself in the opinions of those who can make or mar his success. This is realized by every prac-

itioner after a few years' practice—but often too late. The work before us is one that is a pleasure to recommend to those who desire a book to aid them in obtaining this knowledge. It is scientific; it is practical, and will be found as helpful to the 'busy practitioner' as to the student."

### The National College of Law.

This institution is chartered under the general-welfare Act of the Legislature of the Commonwealth of Tennessee to provide for the organization of corporations for purposes of education and instruction, in order to aid in the advancement of legal education and in the solution of the great legal, constitutional, and diplomatic questions which are constantly being evolved in the ever-varying affairs of life. Also to maintain and conduct a legal training institution of learning, or college for the education of both sexes, with full authority to maintain courses of instruction and study in the law and related sciences and arts; to confer and bestow the usual degrees and honors and issue and grant diplomas and law licenses in evidence thereof, and to do all other acts and things which an educational corporation for the common welfare of society may of right do for the promotion of its general welfare and best interests and for the advancement of legal education; and is duly vested with all the rights, and privileges appertaining to American colleges and universities, to the end that the study of the science and practice of law and diplomacy and cognate sciences and arts may be pursued to a higher degree and by more liberal and scientific methods than are used by existing legal training institutions.

### Pamphlets Received.

We have received from Dr. S. A. Knopf a copy of his essay awarded the prize at Berlin in 1899.

This essay has since been printed in almost every language of the globe, and its distribution has been world-wide.

Through the kindness of Dr. Franklin Staples, of Winona, Minn., several magazines and papers of great value have been added to the Academy library.

Dr. Staples has always taken a great interest in the work of the Academy and has extended help and support on many occasions.

When a negro is accused of any offence, the rule in the South appears to be: "When in doubt, burn him at the stake."

# **Phillips' Emulsion**

50% best NORWAY COD LIVER OIL  
minutely sub-divided,  
WITH WHEAT PHOSPHATES (Phillips')

Pancreatized, Palatable, Permanent, Miscible in Water, Milk, Wine, etc.

# **Phillips' Milk of Magnesia**

Mg H<sub>2</sub> O<sub>2</sub> (FLUID.)

"THE PERFECT ANTACID."

for correcting Hyperacid conditions—local or systemic.  
Vehicle for Salicylates, Iodides, Balsams, etc.

# **Phillips' Phospho-Muriate of Quinine, COMP.**

TONIC AND RECONSTRUCTIVE.

WHEAT PHOSPHATES, WITH MURIATE OF QUININE AND STRYCHNINE.

PHILLIPS' WHEAT PHOSPHATES (ACID).

PHILLIPS' SYRUP OF WHEAT PHOSPHATES.

PHILLIPS' DIGESTIBLE COCOA.

THE CHAS. H. PHILLIPS CHEMICAL CO., NEW YORK.

# MELLIN'S FOOD

One great cause of sleeplessness in infants is improper or insufficient food.

An infant will usually sleep well after taking food that satisfies and nourishes.

Mellin's Food satisfies and nourishes; contains enough to satisfy and the kind to nourish.

SAMPLES OF MELLIN'S FOOD TO PHYSICIANS FREE.

MELLIN'S FOOD COMPANY, BOSTON, MASSACHUSETTS.

### Information Wanted.

By I. L. VAN ZANDT, M. D., Fort Worth, Texas.

*To the Editor:*—In order to prepare a statistical table showing the results of the treatment of pneumonia with creosote or creosote carbonate, I ask the aid of the profession.

Let every physician who has given the treatment a trial send me on a postal card during April, 1902, the number of cases treated, and number of deaths. State whether of record or an approximation.

Please answer yes or no to the following questions:

1. Do you believe creosote ever aborts pneumonia?

2. Do you believe the majority of cases are mitigated by it?

3. Have you found cases, which, having plenty of time, were entirely uninfluenced by it?

To every one favoring me with a report, I promise to mail a copy of the condensation of reports.

If the remedy is what some of us think, the world ought to know it. If we are deceived, we ought to be undeceived. Therefore send on the reports.

The Committee on Pathologic Exhibit for the American Medical Association is anxious to secure materials for the coming session at Saratoga, June 10th to 13th inclusive.

This exhibit was accorded much praise and comment during the sessions at Atlantic City and St. Paul respectively, where were collected valuable exhibits from all parts of the country. The materials included not only pathologic specimens, but the allied fields, bacteriology, hæmatology, physiology and biology, were well represented.

It would also be desirable to secure exhibits of new apparatus, charts, etc., used by teachers of pathology and physiology in medical colleges.

This exhibit has already become a permanent feature of the annual sessions of the American Medical Association, and the Committee is desirous of securing its list of exhibits as early as possible, and to this end asks those having desirable materials to communicate with any member of the Committee.

To contribute to the value of the work, it is suggested that, as far as possible, each contributor select materials illustrative of one classification, and by such specialization enhance the usefulness of the display.

Those lending their materials may feel assured that good care will be given their exhibits while in the hands of the Committee,

and due credit will be given in the published reports.

Very respectfully,

F. M. JEFFRIES,  
214 E. 34th St., N. Y. City,

W. A. EVANS,  
108 State St., Suite 1403,  
Chicago, Ill.,

ROGER G. PERKINS,  
West. Res. Med. School,  
Cleveland, O.,

*Committee on Pathologic Exhibit, American Medical Association.*

### Physicians as Business Men.

A temporary embarrassment is one thing and an habitual or slipshod method another. To those under the stress of the former, every consideration should be shown; for those afflicted with the latter, the kindest treatment is to be called to time. If made to recognize their just obligations, especially to settle them, they will likely pursue the same tactics with those indebted to them, and the opposite of the vicious circle of careless paying and careless receiving will be established. In this intensely utilitarian and commercial age, doctors must adopt sound business methods. To charge well and collect systematically is a good plan to follow. People appreciate you more if you value your own services. They pay nearly everybody else better than the physician. The doctor gets less when he saves a human life than the undertaker would have received if he had had the patient to bury, and much less than the lawyer would have charged if he had had the chance to settle the succession. If your services are valuable, make the patient understand and pay them in proportion. Your families will be better off, and the profession will have a better business reputation, even if there are a few people less who *say after you are dead*, how kind you were.—*New Orleans Medical and Surgical Journal.*

### Thiosinamin.

Juliusberg (quoted in *Münchener Medizinische Wochenschrift*, No. 37, 1901,) finds that thiosinamin has given excellent results in the skin clinic of Breslau in the treatment of hypertrophied scars, keloid, and scleroderma. An injection of a ten per cent. solution in glycerin and water was employed—thiosinamin, 10 parts; glycerin, 20 parts; distilled water, enough to make 100 parts—three to ten drops being employed at a time.—*Therapeutic Gazette.*

THE BEST RESULTS ARE ASSURED IN BROMIDE  
TREATMENT WHEN YOU SPECIFY

# PEACOCK'S BROMIDES

AND THE GENUINE IS DISPENSED.



NEUROLOGISTS and General Practitioners prefer it because of its superior qualities over the commercial salts. . . Each fluid drachm represents fifteen grains of the combined chemically pure Bromides of Potassium, Sodium, Ammonium, Calcium and Lithium.

DOSE: ONE TO THREE TEASPOONFULS, ACCORDING TO THE AMOUNT OF BROMIDES REQUIRED.

# CHIONIA

From CHIGNANTHUS VIRGINICA.

**R**E-ESTABLISHING portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.

Hepatic  
Stimulation.

Without  
Catharsis.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES A DAY.

FOR CLINICAL TRIAL WE WILL SEND FULL SIZE BOTTLE TO ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

**PEACOCK CHEMICAL CO.**  
ST. LOUIS, MO., U. S. A.

In CARDIAC and GENERAL MUSCULAR RELAXATION,  
due to Functional Cardiac and Circulatory Disturbances,

# CACTINA PILLETS

Has many Advantages over other Heart Stimulants.

IT HAS NO CUMULATIVE ACTION, AND  
IS ABSOLUTELY SAFE AND RELIABLE

EACH PILLET REPRESENTS ONE ONE-HUNDREDTH OF A GRAIN CACTINA, THE ACTIVE PROXIMATE PRINCIPLE OF CEREUS GRANDIFLORA

DOSE: ONE TO FOUR PILLETS THREE TIMES A DAY.

SAMPLES MAILED TO PHYSICIANS ONLY.

The CHIEF Characteristics of the Physiological Action of

# SENG

Is to promote Normal Digestion by encouraging the flow of Digestive Fluids.  
It is the Modern and Most Successful Treatment for  
**INDIGESTION.**

A PALATABLE PREPARATION OF PANAX SCHINSENG  
IN AN AROMATIC ESSENCE.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES  
A DAY.

A FULL SIZE BOTTLE, FOR TRIAL, TO PHYSICIANS WHO WILL PAY EXPRESS CHARGES.

**SULTAN DRUG CO., St. Louis, Mo., U. S. A.**



### The Church and Preventive Medicine.

When we find helpers in other callings we should show our grateful recognition. A parish priest in London who recognized the tremendous influence for evil of disease among his congregation preached upon the subjects of sanitary reform, and found that he had results from his sermon which he had never had before. Over 8,000 copies of the pamphlet containing his sermon have been sold. He began with the following words:—

"In the town of Gloucester there is a beautiful cemetery, and in one corner of the cemetery there are the graves of no less than 280 little children, all under 10 years of age, all of whom died seven years ago when a terrible attack of smallpox visited that town. Of these 280 children who died of smallpox, 279 were unvaccinated and only one was vaccinated."—*American Medicine*.

When the physician is wrestling with the problem of maintaining a patient's strength in typhoid fever, pneumonia, etc., he should not overlook Nutrient Wine of Beef Peptone, a preparation presenting the entire digestible substance of fresh, lean beef in absorbable form. This article, which is made by Armour & Company, is the most palatable and nutritious liquid food offered the profession, and serves admirably in all cases where it is necessary to keep up nutrition without taxing the digestive organs.

Nutrient Wine may also be used to advantage in that large class of stomach troubles that the average physician meets daily.

When all the world is Morgan's, lad, and all the sea between;  
And every lamb a Sage, lad, and every lass a Green;  
Then hey for automobile, lad, and to Wall Street away;  
Young bulls must make their pile, lad, or bears may have their day.

When all the oil is Rockefeller's and all the stocks are Hill's;  
And all the railways Vanderbilt's, or Gould's, or D. O. Mills';  
To England in your airship, lad, of Schwab and Yerkes the peer;  
God grant you find a billion there, to found a college here.

—*Life*.

THE HYGIENE OF THE RAILROAD CAR.—So long as railroad companies vie with each other in making their cars as luxurious and gaudy as possible, without regard to after-effects on their patrons, just so long will railroad travel be accompanied with danger from infectious diseases.—*Journal American Medical Association*.

### Legal Status of the Eddyite and the Osteopathist.

The tangle as to the legal status of the osteopathic and Eddyite practitioners in different states grows greater every day. In Kansas City, Mo., an Eddyite healer who failed to report a case of diphtheria was discharged because the Court held that she was not a physician, and therefore not amenable under the ordinance. In Des Moines, Iowa, a judge has ruled that the State Board of Medical Examiners must grant a certificate to practice osteopathy to a graduate of the Still College of Osteopathy at Des Moines. This is an absurd decision, and should be reversed by the Supreme Court. The Supreme Court of Illinois has just decided that osteopathy is the practice of medicine, as defined by the statutes of that state. This decision is in harmony with similar decisions in Nebraska and Massachusetts. In Ohio the laws permit the practice of osteopathy, but the decision in general harmonizes with that in the Illinois case. The wording of the Illinois Act is as follows:

"Any person shall be regarded as practicing medicine, within the meaning of this act, who shall treat or profess to treat, operate on, or prescribe for, any physical ailment or any physical injuries to, or deformity of, another. *Provided*, that nothing in this section shall be construed to apply to the administration of domestic or family remedies in cases of emergency, or to the laws regulating the practice of dentistry or of pharmacy. And this act shall not apply to surgeons of the United States army, navy, or marine-hospital service in the discharge of their official duties, or to any person who ministers to, or treats, the sick or suffering by mental or spiritual means, without the use of any drug or material remedy."

In the Illinois decision the Court emphasized the fact that the osteopath does not use drugs or any other material remedy, nor does he treat the sick by mental or spiritual means, and that therefore the use of the word *material* has no significance. The duty is plain that when the statutes do not make it clear as to what constitutes the practice of medicine, then new laws or amendments should be passed to settle all doubts. Beyond all question the osteopath and Eddyite are aiming to practice medicine, and to do so without the trouble and expense of learning the science and art of medicine. And they are equally desirous of avoiding the responsibility of their ignorance in caus-

**Doctor:**

*When seeking a palatable and highly nutritious liquid food to maintain a patient's strength during critical illness, remember NUTRIENT WINE OF BEEF PEPTONE.*

---

**ARMOUR & COMPANY**

**CHICAGO**

ing death, etc. The double fraud must not be permitted.—*American Medicine*.

#### Sanmetto in Cystitis, Hypertrophy of the Prostate and in Pre-Senility.

I have prescribed Sanmetto in my practice for a period of seven years with the happiest results to my patients and great satisfaction to myself. In cystitis, true hypertrophy of the prostate, and where the complex generative system has lost its tone, vigor and vivacity, it is the remedy par excellence. Many imitations are on the market, but the Old Chemical Company of New York makes the only Sanmetto.

J. M. STUKEY, M. D.

Lancaster, Ohio.

#### Agricultural Reports.

Duplicates Wanted by the University of Maine.

Complete sets of the agricultural and horticultural reports of the various States are needed in the library of the University of Maine in the work of the College of Agriculture and for reference by citizens of the State, and it is the desire of the librarian to complete, so far as is possible, the partial sets already in the library.

In order to obtain the needed volumes, a considerable number of duplicates are required for use in making exchanges. Individuals having even single volumes of the Agriculture of Maine, or the agricultural and horticultural reports of other states, that they are willing to give for this purpose are requested to write just what they have to Ralph K. Jones, Librarian of the University of Maine, in order that he may know where to send for them if needed. These should not be sent to the library until asked for, unless the express charges are prepaid.

If this request meets with the response that is hoped for, the librarian will be glad to aid any public or grange libraries which may wish to complete their file of the Agriculture of Maine, if they will let him know what they want.

CHARLES D. WOODS,

Director.

Orono, April 3, 1902.

LEGALIZING OSTEOPATHY is really only a scheme for practicing medicine by a short cut. Every man who has not got the time, the endurance, the brain, to enter the regular medical profession in the regular way, and who wishes to be a fake practitioner of some kind or other, will take this method of getting a license.—*The Post Graduate*.

#### Dupuytren's Contraction of the Palmar Fascia.

At the time he published a paper on his observations of seventy cases of Dupuytren's contraction, Smith (*New York Medical Journal*, Aug. 31, 1901,) advocated subcutaneous division of the contracted bands by as few incisions as possible, sufficient to allow of full extension of the fingers. Since that time Smith has learned the value of multiple incisions and punctures of the nodulated parts of fascia in addition to section of the contracted bands. These multiple incisions cause a rapid absorption of the hardened tissue. In Smith's experience, he has found no more satisfactory treatment in Dupuytren's contraction than subcutaneous section.

There has not been much tendency to recurrence, but, Smith remarks, even if every case were to begin to re-contract after a lapse of months or years, and were to require further operation, such treatment would yet remain a desirable method. He has not found it necessary to excise the hardened and contracted tissue in any case.—*Therapeutic Gazette*.

J. P. W. Smithwick, M. D., in an article entitled "Therapeutics of Convalescence from La Grippe," says in the *Southern Medical Journal*: "During the past year I have made use of Angier's Petroleum Emulsion with Hypophosphites among my patients which were convalescing from La Grippe. All of them improved rapidly with its use, who had done badly under the administration of cod liver oil and various tonics. I have noted no cases in which Angier's Petroleum Emulsion caused digestive or intestinal trouble, it being, on the contrary, well borne by weak and irritable stomachs, etc."

Dr. Smithwick gives clinical histories of a number of cases, in all of which the relief of the cough was prompt, digestion and assimilation resumed normal conditions with a consequent improvement in the appetite, there was an invariable gain in weight, and the patient's convalescence was prompt and satisfactory in every instance.

JUSTIFIABLE FEARS.—"They are just ruining that boy of mine at the kindergarten," said the worried father.

"What is the matter?" asked the friend, glad to hear one jarring note in the usual song of praise about "the boy."

"He calls his chums 'William' and 'Henry' instead of 'Bill' and 'Hank.' Wouldn't that jar you?"—*Indianapolis Press*.

# HERE IT IS IN A NUTSHELL

A **Stimulant** excites vital action, a **Tonic** supports vital action, but a **Food** repairs the waste caused by vital action.

"The body derives its **energy** from the **food** it assimilates. **Fat** contains more energy than any other kind of food."

Prof. WM. H. HOWELL, M.D., PH. D.

*Samples sent to  
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on application*

**Hydroleine** is a **fatty food** which contains this "energy" in its most nutritious form. It is a pancreatized, palatable emulsion of pure cod-liver oil, completely digested, and capable of absorption and assimilation by the weakest system.

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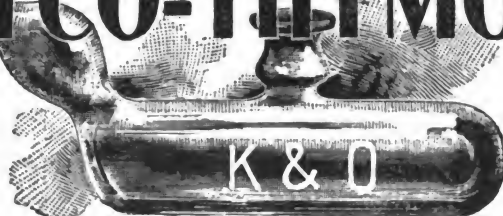
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## THE ALKALINITY OF BLOOD SERUM

# GLYCO-THYMOLINE

(KRESS)



Birmingham Nasal Douche.

**A PURGATIVE** *For Mucous Membrane*

INDICATED IN ALL CATARRHAL CONDITIONS, ESPECIALLY

**NASAL CATARRH**

"Glyco-Thymoline (Kress) is well adapted for the treatment of catarrhal conditions of the mucous membranes. I have frequently employed it with benefit in nasal, buccal and bronchial affections. Direct local medication is of much advantage in these cases. In some instances we may safely depend on topical measures alone; in those where internal treatment is also necessary, Glyco-Thymoline (Kress) proves an excellent adjuvant."

MEDICAL BULLETIN, Phila., Pa., March, 1899.

### SPECIAL OFFER

A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges. K & O Douche to physicians, 15 cts.; \$1.50 per doz. Retail 25 cts. Remit stamps.

KRESS & OWEN COMPANY, Chemists, 221 Fulton Street, New York

**HASTENS RESOLUTION AND FOSTERS CELL GROWTH**

### Stuffing Children's Minds with Undigested Knowledge.

Mark Twain has issued a pamphlet entitled, "English as She is Taught," which makes a needed protest against the attempt to cram the memories of school children with information far beyond their power of assimilation. The result often is that the poor little minds have a sort of indigestion which is to the true pedagogue more pathetic than it is amusing. Twain gives some of the answers in *physiology* by pupils in public schools:

"Physillogigy is to study about your bones stummick and vertebry."

"Occupations which are injurious to health are carbolic acid gas which is impure blood."

"We have an upper and a lower skin. The lower skin moves all the time, and the upper skin moves when we do."

"The body is mostly composed of water and about one-half is avaricious tissue."

"The stomach is a small pear-shaped bone situated in the body."

"The gastric juice keeps the bones from creaking."

"The Chyle flows up the middle of the backbone and reaches the heart where it meets the oxygen and is purified."

"The salivary glands are used to salivate the body."

"In the stomach starch is changed to cane sugar, and cane sugar to sugar cane."

"The olfactory nerve enters the cavity of the orbit and is developed into the special sense of hearing."

"The growth of a tooth begins in the back of the mouth and extends to the stomach."

"If we were on a railroad track and a train was coming, the train would deafen our ears so that we couldn't see to get off the track."

"John Bright is noted for an incurable disease."—*American Medicine*.

**GLEAM OF LIGHT.**—A woman in a tattered shawl rang the bell of a stately mansion.

"May I die on your doorstep here?" she asked, respectfully, of the butler who presently appeared.

"No," was the brusque reply.

The woman was turning sadly away when a beautiful child with golden hair cut in:

"Oh, papa," cried the child, "please do let the woman die on the doorstep."

"Very well," said the father, for he could deny his little daughter nothing.

So the woman died on the doorstep, feeling that the world was not altogether dark after all.—*Detroit Journal*.

### Medical Sharks and Medical Harpies.

An advertising circular of a so-called sanatorium in a city not one hundred miles from Philadelphia, has recently been brought to our attention with the statement that the proprietor, who glories in the name of physician, is a noted abortionist. The printed matter of the circular is, like others of its kind, adroitly worded to give the impression of skill, experience and professional standing. Thorough antisepsis and the most modern technique are especially guaranteed, and every measure is taken that will contribute to the bodily comfort of the inmates. In order still further to capture the unwary medical victim, a discount of the fees is allowed physicians who refer cases to the institution.

A light that is set upon a candlestick, and often one that is placed beneath a bushel, cannot be hid, and the snares of the medical sharks and harpies, whose illegitimate business it is to prey upon the overconfiding or wilfully colluding medical men, sooner or later acquire a well-merited odium which rises as an offense in the nostrils of upright, conscientious men. The division of the fee, while it may be legally correct, is antagonistic to the recognized medical code of ethics, and all such offers, large or small, should be the danger-signals to careful men. Almost invariably such a discount partakes of the nature of hush money and stamps the recipient as partaker in the nefarious business that may be transacted behind the doors of these criminal institutions lurking beneath the sheltering influence of a benevolent name. There are sanatoria and sanatoria, but it takes more than a mere name to guarantee integrity of purpose. Unfortunately as it is that such houses find protection from a municipal point of view, it is a crime against the profession that there are found those ready to further their projects for hard, but not clean, cash.—*Phil. Med. Journal*.

### Removal of Gunpowder Stains.

By DR. E. G. CORBETT, Hampton, Fla.

On Christmas day a boy of twelve filled a vaselin bottle with powder and exploded the same. I arrived on the scene about three hours after the accident and found the cornea and sclerotic of both eyes and the face literally blown full of powder. I removed a dozen or more flakes of powder from each cornea with a spud; also

# THIS JOURNAL

would have to be many times its present size to print even brief abstracts of the number of cases of Nervous Exhaustion, Malnutrition, Anæmia, General Debility, permanently cured by

## GRAY'S Glycerine TONIC Comp.

It is an unequalled tonic, restorative, and reconstructive.

THE PURDUE FREDERICK CO.,  
15 Murray Street, New York.



## MICAJAH'S MEDICATED UTERINE WAFERS

LEUCORRHOEA, ENDOMETRITIS, VAGINITIS, GONORRHOEA and all other diseases of an inflammatory character readily respond to its ANTISEPTIC, ASTRINGENT and ALTERATIVE Properties

No powder to spill. Nor water to soil the clothing.

Samples and Literature by mail Gratis

SIG: Insert one Micajah Wafer into the vaginal canal, up to the Uterus, every third night, preceded by copious injections of HOT water.

MICAJAH & CO.

Warren, Pa.

removed the powder from the sclerotic. Did the operation under a four per cent. solution of cocain. After the operation I used a fifteen per cent. solution of Hydrozone in the eyes. After removing the particles of glass from the face, I kept a cloth over it saturated with a fifty per cent. solution of Hydrozone. At the end of two weeks I used a saturated solution of boric acid in the eyes and painted the face twice daily with equal parts of Hydrozone and glycerin. The eyes are well and powder stains have disappeared from the face.—*Medical World*.

No ECCENTRICITIES.—“I guess I’m not a genius after all,” sighed the amateur poet. “I don’t seem to have any eccentricities.”

“No,” his wife admitted, “you haven’t, that’s true. ‘Eccentricities’ is too mild a thing to call your fool performances.”—*Chicago Record-Herald*.

The following typewritten letter has been recently received by a well-known physician of Maine:

THE COLUMBIA COLLEGE OF OSTEOPATHY,  
30-31 The Auditorium Building,  
Chicago.

March 12, 1902.

Dear Sir:—We have just organized a special spring class for our students, and as it offers a great financial saving to you, I should strongly advise you to join it. We are offering our full Mail Course in Osteopathy, bound in five parts, examination papers, Diploma and Degree D. O., to you upon payment of \$10.00 only, instead of \$25.00. We do not wish you to miss the chance of getting right to work at this best of all professions merely because you cannot afford the full fee. You should be all through your course and in active practice in two months, reaping the cash fruits of your labor. To compensate ourselves, however, for this reduction in price we must withdraw the offer of the Anatomical Chart and books on physiology and anatomy which we offer to our \$25.00 students. However, as these latter works are not essential to your success as an osteopath you will probably be much better pleased with this \$10.00 offer. There will be no further reduction in cost of our course at any time; in fact, we are seriously considering whether, in justice to our students, and to maintain the dignity of our diploma, we can continue to offer these privileges longer than a few weeks. I am consulting your interests in advising you to join this spring class at once, remitting full or part payment for the same. We do not find that

any of our students are unable to pass our examination, because our instruction is so plain; and I shall close here with the earnest recommendation that you fit yourself to make an early start in this profession.

Very sincerely,

N. S. SNYDER,

Secy.

No REST FOR HIM.—“John,” she said to the dying husband, “you will soon be in the glories of the promised land. As soon as you get there I want you to send me word—some message—some token!”

“For heaven’s sake, Molly,” was the reply, “ain’t you never goin’ to give me a holiday?”—*Atlanta Constitution*.

“The Cow Pea” is the title of the latest publication issued by the Experiment Farm of the North Carolina State Horticultural Society, at Southern Pines, N. C. This book, neatly bound and illustrated in plain and concise manner, discusses the value and uses of this important crop, the Cow Pea. Every reader can get a copy free by writing to the Superintendent of Experiment Farm, Southern Pines, N. C.

#### The General Toxemias And Their Treatment.

To the *Clinical Review* for October, 1901, SHELTON contributes a paper on this theme, in which he concludes that the following needs are to be met by the use of the drugs named: Elimination of toxins in the blood (sodium phosphate); stimulants of liver cells (water and bile salts, the normal stimulants, olive oil, sodium salicylate); the removal or diminution in the amount of the poison, first by removal from the alimentary canal (castor oil and bile, by its peristaltic and secretion-exciting power), and limiting the ingestion of nuclein compounds; the quickening of the circulation by exercise, systematic massage, and skin stimulation.

The most efficient treatment for secondary anemias is the elimination and neutralization of the toxins. Thus, the injection of anti-toxin in diphtheria neutralizes the diphtheritic toxin, the leucocytosis diminishes, and the cells increase in number and contents. A similar result is obtained by the injection of antistreptococcus serum in cases of pure streptococcus infections. But in many of these infectious anemias we know of no antitoxin. Here the elimination of the poisons is the next most necessary measure. For those poisons generated in the alimentary canal,



**Preparation—Par Excellence**

**“Fellows’**

**Syrup of Hypophosphites”**

CONTAINS

**Hypophosphites of**

**Iron,**

**Lime,**

**Quinine,**

**Manganese,**

**Strychnine,**

**Potash.**

Each fluid drachm contains Hypophosphite of Strychnine equal to 1-64th grain of pure Strychnine.

**Offers Special Advantages**

**in Anaemia, Bronchitis, Phthisis, Influenza, Neurasthenia,  
and during Convalescence after exhausting diseases.**

*Dr. Milner Fothergill wrote: “It (Fellows’ Hypophosphites) is a good all-round tonic, specially indicated where there is NERVOUS EXHAUSTION.”*

**SPECIAL NOTE.—Fellows’ Hypophosphites is Never sold in Bulk, and is advertised only to the Medical Profession. Physicians are cautioned against worthless substitutes.**

Medical letters may be addressed to

**MR. FELLOWS, 26 Christopher St., New York.**

**LITERATURE OF VALUE UPON APPLICATION.**

and chronic in character, the most efficient measure has seemed to be this combination:

- R Ox-gall  
Guaiacol carb., ää gr. ij  
Or else this:  
R Ox-gall,  
Benzonaphthol,  
Pancreatin, ää gr. ij.

Ox-gall is the physiological remedy in these cases. It increases peristalsis and secretion of the normal fluids. Its salts, by their reabsorption, act as the most efficient liver stimulant, and the liver is enabled to eliminate the xanthin compounds and the toxins absorbed from the bowels.

The cases of autointoxication are quickest relieved by castor oil. It seems that the oil mechanically combines with the poisons and prevents their absorption; therefore the wisdom of beginning the treatment by a dose of castor oil. Glycerine in tablespoonful doses acts nearly as well, and may be continued longer. In cases where much gastric fermentation exists dioxide of hydrogen ( $H_2O_2$ ) may be added. The blood in some cases is loaded with xanthin compounds and absorbed poisons, as is shown by the large amount of indoxyl sulphates in the urine. Here benefit will be derived from sodium phosphate given on an empty stomach in one-drachm doses. The benefit derived is by clearing the circulation, and not by neutralizing the poisons or preventing their formation. The benefit is obtained when purgation does not result from the administration.

It is to be noted that in these chronic secondary anemias the administration of iron is attended with unfavorable results. The iron accumulates in the liver, the bile becomes thicker and the liver clogged, and more poison escapes into the general circulation, with the result of an increase of the trouble; but when the bowels, liver, and circulation have been cleared, and the hemoglobin index is low, much benefit may be obtained by iron combined with aloin, cascarn, podophyllin, ox-gall or sodium phosphate. The stimulating effect of arsenic on the formation of corpuscles may be made use of here. The employment of saline infusion has no justification in chronic anemias; its value is restricted to the restoration of the bulk of the blood. It dilutes the plasma, causes slight leucocytosis, and may indirectly aid in the formation of red corpuscles after sudden reduction in their number. It is of great use in hemorrhage and shock. Lavage has been used and very highly recommended in auto-intoxication; it removes efficiently the offending materials in the alimentary canal, but

it is not superior to castor oil, glycerine, or sodium phosphate, and not equal to ox-gall.—*The Therapeutic Gazette*.

GETTING OLD.—Despondent Friend: "Do you know, dear, I'm afraid I must be getting very old."

Consoling Friend: "Nonsense, darling! Why do you think so?"

Despondent Fair One:—"Because people are beginning to tell me how very young I am looking."—*Punch*.

#### What are You Prescribing?

The popularity of any one product is a positive assurance that it will immediately have a host of imitators, all greedy to secure the benefit of the reputation which it enjoys, due to its value. Inasmuch as substitutes are never as good as the original preparation, and many times positively dangerous, it is unnecessary to warn our readers against knowingly using these goods.

One of the most popular preparations, at the same time most extensively substituted, is Micajah's Medicated Uterine Wafers. Their intrinsic value in the treatment of diseases of women makes it imperative that the original only be used, if you desire satisfactory results, and that the doctor prescribing should make it his duty to see that a substitute is not given his patient.

A curious exposition of callousness and greed was recently made in a civil suit brought against a Colorado surgeon. He became interested in the case of a cripple whom he found begging on the street, and by an operation, requiring great skill, removed his disability. The relatives of the cripple promptly brought suit against the physician for removing their means of support, claiming that, as a cripple, the youth had brought them in an average of about \$5 daily, while now they were compelled to support him until he could gain means of earning his living. The judge promptly dismissed the case on hearing the presentment of the prosecution.—*American Medicine*.

THE LISTENER AT THE DOOR.—"Did she say, 'This is so sudden'?"

"No; her mother was listening at the key-hole, and she didn't dare to throw on any frills."

"How do you know her mother was there?"

"Because stooping over shuts off her wind, and you could hear her gasping all over the room."

"Well, what did Minnie say?"

"She whispered: 'Cut it short, Jack. Ma is apoplectic.'"—*Cleveland Plain Dealer*.

# Journal of Medicine and Science.

ISSUED ON THE TENTH OF EACH MONTH.

In the Interests of Public Health, and in order that the People of Maine may reap the great Benefits, both hygienic and economic, assured by a judicious Application of the Principles of Preventive Medicine, this Journal supports the following Propositions and urges Physicians and Laymen to work diligently to further their Consummation.

- 1st. The Establishment of a Sanatorium for the Treatment of the Consumptive Poor.
- 2nd. The Abolishment of the Coroner System and the Appointment of Medical Examiners.
- 3rd. The daily Inspection of School Children by School Physicians.
- 4th. The more liberal Endowment of our Medical Schools by private Charity, and the voting of larger Appropriations to our State and Local Boards of Health.
- 5th. The Establishment of a State Bacteriologic Laboratory.

For, surely, health is the prime essential to success in life, and the health of the people is the foundation upon which all their happiness and all their power depends.

Vol. VIII.


PORTLAND, MAINE, MAY, 1902.

No. 6.

## Original Articles.

\*Ablation of both mastoids for chronic suppurative inflammation of the middle ear, followed by extreme variations in the temperature of the different parts of the body at the same time, and of the whole body at different times, of more than twenty degrees Fahrenheit, there existed extreme high temperature in the mouth ( $114^{\circ}\text{F.}$ ,  $45.5^{\circ}\text{C.}$ ) with extreme low temperature in the rectum ( $94^{\circ}\text{F.}$ ,  $34.4^{\circ}\text{C.}$ ), then changing to low temperature in the mouth with extreme high temperature in the rectum, again changing to extreme high temperature in both the mouth and rectum, to be followed by extreme low temperature in both the mouth and rectum, the extremes of temperature not being measured by any available thermometers that registered from  $94^{\circ}\text{F.}$  to  $114^{\circ}\text{F.}$ , and four thermometers were broken by the intense heat. Later amblyopia developed in both eyes. Complete recovery.

By E. E. HOLT, M. D., Portland, Me.

HE history of this case to the time she presented herself at the clinic at the Maine Eye and Ear Infirmary is not unlike that of many others. She was a domestic, twenty-one years of age, who, when she was seven years old, had earache on the right side followed by a discharge from the ear. Within a year from that time the left ear ached and was followed by a discharge from the ear. The ears had discharged a little at times from this time to the time she presented herself at my clinic in December, 1900.

There were the usual markings of the long-ago earache, perforation of the membrana tympani, and a slight discharge from each ear. She was admitted as an in-patient and treated from Dec. 12, 1900, to Feb., 1901, in the hope that the disease might be cured without an operation. There were cases of ablation of the mastoid in the Infirmary at the time she was admitted, and their recovery was so satisfactory that she was willing and even anxious to have the operation.

Accordingly ablation of the left mastoid was performed the first of February. The cells were found diseased throughout. Ablation of the right mastoid was performed the first of April, the cells being found involved as in the left mastoid. Recovery from these operations was uninterrupted and she left the Infirmary free from discharge from the ears and with good hearing power in both ears.

During the fall of 1901 she had some discharge from the right ear, none from the left, and in November she again presented herself at my clinic.

As she attended the clinic from day to day, I found the meatus of the right ear filled with a clear gelatinous discharge, examination of which by the pathologist, Dr. A. H. Little, showed only scattering staphylococci.

This gelatinous discharge was so persistent and its treatment so unsatisfactory as an out-patient, I advised her again to enter as an in-patient, which she did on Nov. 16, 1901.

\*Paper read at the fifty-second stated meeting of the Maine Academy of Medicine and Science, held April 14, 1902.

On the 18th of November, under ether, I curetted the tympanum through the meatus, enlarging the opening in the membrana tympani. The discharge ceased and she was relieved, and as a free patient she began to do some work on the floor on which she was located.

The temperature was not far from normal, but the pulse averaged high, ranging from 80 to 100 per minute.

On the 18th of December, at 6.30 A. M., the temperature by mouth was found 102.2°F., pulse 96; at 3.30 P. M., it was 100°F., pulse 90.

On 19th, 10.15 A. M., temp. 102.6°F., pulse 96  
3.30 P. M., " 100°F., " 90

On 20th, 10.15 A. M., " 104.3°F., " 88  
7.00 P. M., " 105.6°F., " 88

On 21st, 11.15 A. M., " 104°F., " 88

There were no pronounced chills or even chilly sensations. There was no giddiness, nausea or vomiting. She was able to walk a straight line normally well. There was no disturbance of pupillary reaction or vision and the fundus of each eye was fairly normal. The mental condition was good and there was no disturbance of the speech. In fact, there was an absence of symptoms to account for the rise of temperature.

She complained of pain on the right side of her head, but it was ill defined. There was no special tenderness on pressure over the mastoid or internal jugular vein. She liked a rubber bag, filled with warm water, near her head, and was fond of it if there was not much heat in it.

At 12 M., assisted by Drs. Little and Tobey, I operated upon her, removing the ossicles, curetting the tympanum and opening the lateral sinus. There was but little pus found and the blood in the lateral sinus seemed to be in a fairly normal state.

For eighteen days after the operation the temperature was but little above normal and the pulse ranged from 80 to 100 per minute. On Jan. 8th, 1902,

at 8.00 A. M., temp. 105.4°F., pulse 100

On Jan. 9th,  
at 8.45 A. M., " 105.2°F., " 132  
at 7.00 P. M., " 105°F., " 98

On Jan. 10th,  
at 10.00 A. M., " 101.4°F., " 90  
at 5.15 P. M., " 107°F., " 104  
at 6.15 P. M., " 98.8°F., " 104  
at 9.00 P. M., " 107.8°F., " 96  
at 10.15 P. M., " 108°F., " 86

On Jan. 11th,  
at 1.00 A. M., " 97.4°F., " 116  
at 8.15 A. M., " 98.3°F., " 94  
at 11.00 A. M., " 99.9°F., " 130

Again operated at 11.30 A. M., assisted by Drs. Cousins, Little and Coburn. Opened lateral sinus, found blood in good condition. Trephined skull and explored temporo-sphenoidal lobe of the brain. There seemed to be considerable pressure present, as the lateral sinus and the dura mater bulged and markedly pulsated when exposed. For fourteen days after this operation the temperature was but little above normal, and the pulse ranged from 80 to 100 per minute.

On Jan. 26th,

at 12.15 P. M., temp. 98.6°F., pulse 96  
at 3.00 P. M., " 104.2°F., " 114  
at 3.45 P. M., " 105°F., " 96  
at 4.15 P. M., " 106°F., " 116  
at 4.30 P. M., " 108°F., " 116  
at 5.00 P. M., " 106°F., " 100  
at 9.00 P. M., " 97.6°F., " 90

On Jan. 27th,

at 3.00 A. M., " 104°F., " 78  
at 6.00 A. M., " 110°F., " 88  
at 8.00 A. M., " 104.8°F.

Up to this time the temperature had uniformly been taken in the mouth, but in consultation with Dr. Clough, of Bangor, he suggested taking the temperature of the rectum at the same time the temperature of the mouth was taken.

8.20 A. M., T. M. 99°F., T. R. 100.8°F.  
11.30 " " 98.8°F., " 99.6°F.  
1.30 P. M., " 103°F., " 100.4°F.  
pulse 116  
2.30 " " 105°F., " 99.4°F.  
pulse 100  
5.30 " " 110.4°F., " 99.4°F.  
7.30 " " 104°F., " 103°F.  
11.00 " " 97°F., " 108°F.

On Jan. 28th,

3.00 A. M., " 99.6°F., " 99°F.  
6.00 " " 104.8°F., " 105°F.  
8.00 " " 109°F., " 99.4°F.  
pulse 96  
9.30 " " 110°F., " 99.4°F.  
pulse 100  
11.30 " " 99°F., " 99.4°F.  
2.00 P. M., " 106°F., " 99.4°F.  
3.00 " " 102°F., " 99.4°F.  
5.30 " " 108.2°F., " 106°F.  
7.15 " " 110.4°F., " 109°F.  
9.00 " " 105°F., " 107.8°F.

On Jan. 29th,

3.00 A. M., " 110+ " 110+  
5.20 " " 108.6 " 110  
7.45 " " 111+ " 110.4  
pulse 96  
10.00 " " 112 " 110  
12.00 M., " 98.8 " 99.8  
2.20 P. M., " 111+ " 110  
4.00 " " 104 " 106.4  
pulse 100

6.00 P. M., T. M.	111+	T. R.	107
8.00 " " "	108.8	"	110
		pulse	88
11.00 " " "	111+	"	111+
On Jan. 30th,			
2.30 A. M., " "	96.4	"	97
		pulse	70
5.30 " " "	105.2	"	103.4
		pulse	88
7.30 " " "	111+	"	110
		pulse	96
9.30 " " "	111+	"	110+
		pulse	96
9.45 " " "	111+	"	102.4
		pulse	80
12.00 M., " "	108.4	"	108.4
		pulse	96
1.00 P. M., " "	111	"	110
		pulse	80
2.00 " " "	111+	"	111
		pulse	96
4.00 " " "	107	"	106
		pulse	96
5.30 " " "	111	"	110
		pulse	96
6.45 " " "	111+	"	110+
		pulse	100

The thermometer that registered 111+ was broken, not by accident, but by intense heat.

8.00 P. M., T. M.,	110	T. R.,	106
		pulse	96
On Jan. 31st,			
6 15 A. M., " "	97	"	96.4
		pulse	86
9.00 " " "	111+	"	110
		pulse	96
11.30 " " "	102.4	"	107.4
		pulse	100
2.30 P. M., " "	104.8	"	107.6
		pulse	96
3.30 " " "	106	"	103
		pulse	92
5.00 " " "	114	"	104.8
		pulse	96
8.00 " " "	110+	"	114
		pulse	80
9.00 " " "	110	"	114+
		pulse	90
10.10 " " "	114+	"	114+
		pulse	94
On Feb. 1st,			
6.00 A. M., " "	97	"	96.4
		pulse	78
8.00 " " "	102.4	"	104.6
		pulse	100
9.00 " " "	108.4	"	111.4
		pulse	96
10.00 " " "	114	"	114
		pulse	80
2.30 P. M., " "		"	114
		pulse	80

3.30 P. M., T. M.	114+	T. R.	114
		pulse	96
5.30 " " "	110.4	"	107
		pulse	96
6.30 " " "	110	"	105
		pulse	80
7.30 " " "	106	"	100
		pulse	90
9.30 " " "	110	"	106
		pulse	94
On Feb. 2d,			
4.00 A. M., " "		"	105
		pulse	84
6.30 " " "	114	"	-94
		pulse	84
8.45 " " "	114	"	114
		pulse	88
10.00 " " "	106.4	"	105.4
		pulse	100
1.00 P. M., " "	104	"	106.4
		pulse	96
5.30 " " "	113.4	"	114
		pulse	96
7.30 " " "	114	"	114
		pulse	80

From this time to Feb. 3rd, 6.30 A. M., she was sleeping and the temperature was not taken, but at 6.30 it was taken, the mercury being shaken down below the 94°F. The nurse had marked it 0, both for the mouth and the rectum, because the mercury did not move up when placed and held in either the mouth or the rectum.

9.00 A. M., T. M.,	109	T. R.,	114
		R. 25, pulse	96
12.00 M., " "	112.4	T. R.,	108.2
2.00 P. M., " "	100	"	102.6
		R. 24, pulse	98
4.00 " " "	111	T. R.,	114
		R. 20, pulse	92

Until this time the respirations were about normal. The increase in the frequency of the respirations took place rapidly as I stood and watched her one day, and I asked the nurse to watch her. The nurse reported that within an hour she was breathing quietly, with respirations eighteen per minute.

6.00 P. M., T. M.,	107	T. R.,	113
		R. 20, pulse	96
6.40 " " "	114	T. R.,	112
		R. 22, pulse	100
8.00 " " "	114	T. R.,	114
		pulse	98
10.00 " " "	114	"	114
On Feb. 4th,			
2.30 A. M., " "		"	114
		pulse	86
6.00 P. M., " "	103.2	"	109.4
		R. 25, pulse	100
8.00 " " "	114	T. R.,	114

On Feb. 5th,			
12.20 A. M.,	T. M., 106	T. R., 114	
		R. 20, pulse 98	
4.00 " "	100	T. R., 105.8	
		R. 22, pulse 98	
6.30 " "	98.6	T. R., 106	
		pulse 70	
8.30 " "	114	" 114	
		pulse 96	
10.30 " "	114	" 114	
2.00 P. M.,	114	" 114	
4.30 " "	109.8	" 114	
9.00 " "	114	" 113	
11.30 " "	100	" 110.4	
On Feb. 6th,			
4.30 A. M.,	" 113	" 114	
		pulse 98	
6.00 " "	109	" 114	
		pulse 80	
8.30 " "	108	" 114	
10.30 " "	111.4	" 111.4	
1.30 P. M.,	106.6	" 105	
		pulse 84	
3.30 " "	114	" 114	
		pulse 100	
7.00 " "	114	" 114	
8.00 " "	114	" 114	
		pulse 80	
10.00 " "	110	" 114	
		pulse 96	
On Feb. 7th,			
1.30 A. M.,	" 114	" 114	
6.00 " "	107	" 114	
		pulse 86	
8.00 " "	104.4	" 114	
11.00 " "	114	" 114	
1.30 P. M.,	" 114	" 114	
5.30 " "	114	" 114	
8.30 " "	110	" 114	
12.00 M.,	" 109	" 111	
On Feb. 8th,			
6.00 A. M.,	" 106	" 106	
		pulse 87	
8.00 " "	108.8	" 100.6	
2.00 P. M.,	107	" 106.2	
		pulse 120	
6.00 " "	106	" 108	
		pulse 110	
8.00 " "	112	" 114	
		pulse 108	
11.00 " "	109	" 113	
		pulse 100	
On Feb. 9th,			
2.00 A. M.,	" 114	" 114	
		pulse 100	
5.00 " "	114	" 114	
		pulse 90	
8.00 " "	114	" 114	
12.00 M.,	" 108.8	" pulse 108	
2.15 P. M.,	112	" 109	
		pulse 108	
5.00 " "	114	" 114	
7.00 " "	114	" 114	

On Feb. 10th,			
8.00 A. M.,	T. Axilla 98	T. R., 98	
11.00 " "	T. M., 109.8	" 110	
1.35 P. M.,	" 109.4	" 114	
3.35 " "	" 114	" 114	
5.25 " "	" 98		

This morning she became irritable and refused to swallow, also refused nutritive enema.

On Feb. 11th,			
8.30 A. M.,	T. M., 114+	T. R., 114	
		pulse 116	
12.30 P. M.,		" 99	
4.30 " "	99.4		

Remains irritable and refuses nourishment.

On Feb. 12th,			
10.30 A. M.,	T. M., 98	T. R., 99.6	
1.00 P. M.,	"	" 98	
3.00 " "	" 96	" —94	
5.15 " "		" 98.8	
		pulse 100	

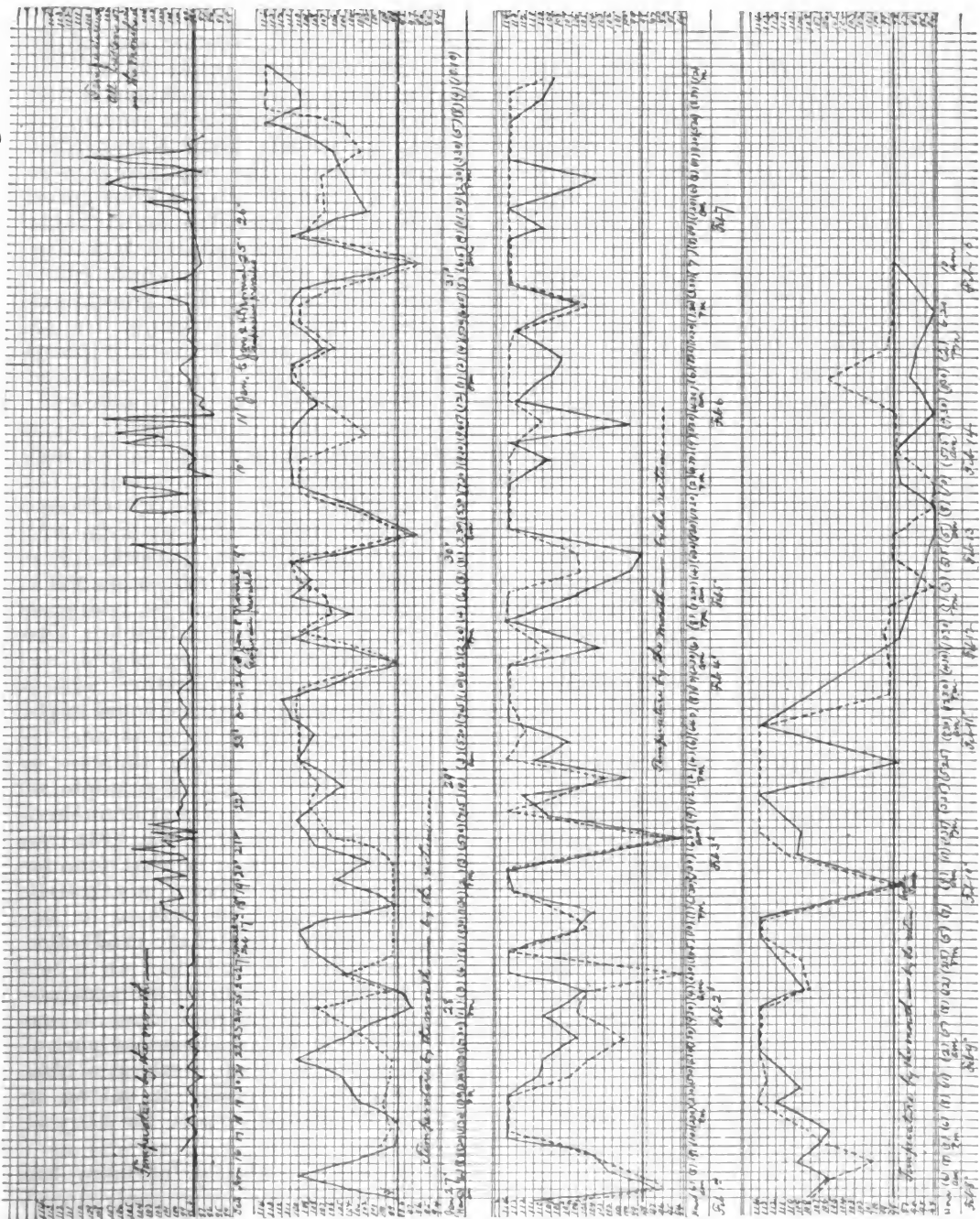
On Feb. 13th,			
5.00 A. M.,	" —94	" 98.6	
8.00 " "	" —94	" —94	
		pulse 104	
10.00 " "	" 97.8	" —94	

On Feb. 14th,			
5.15 A. M.,	" 98.8	" 98	
		pulse 102	
9.30 " "	" —94	" 98.6	
		pulse 108	
11.30 " "	" 98.8	" 106	
		pulse 100	
2.00 P. M.,	" 96	" 99.4	
		pulse 100	
6.20 " "	" —94	" 99	

She left the Infirmary February 15th. For the week previous to this time, she became more irritable and difficult to manage; nevertheless, she gained in strength and was able to go to her aunt's, some half a mile distant, without any injury to herself.

The surface temperature never indicated the high temperature she had, and no more than would be expected to be found in an ordinary case of four or five degrees above the normal temperature. There was at times more or less sweating and the surface was generally moist. She was given frequent sponge baths of alcohol and water. There was nothing approaching a complete collapse in all the changes that took place in the temperature of the body. While there was a manifest hysterical element in the case, it was not pronounced until the last few days of her stay in the Infirmary, when it appeared in consequence of an effort to give her medicine and enemas.

There could be no possible doubt about the temperature being as recorded at the



The upper chart represents the temperature when taken only by the mouth; in the other three, the continuous line represents the temperature by the mouth and the dotted lines that of the rectum. The darker line across the chart represents the normal temperature, 36.8 F., and each square represents vertically 1 degree, numbered at each extremity of the charts, while dates and hour of record are given below.



time it was taken, for a large number of thermometers were used, and it was taken by several different persons, and many times in the presence of myself, the house surgeons, Drs. Coburn and Tobey, and others. As four thermometers were broken by the intense heat, two that registered  $114^{\circ}\text{F.}$ , we are unable to determine how much higher the temperature would have registered had we had a thermometer with a scale of sufficient range to have measured it; but it was the opinion of all who took part in taking the temperature that it would have registered much higher and lower had we had a thermometer to have taken it at its highest and lowest ranges.

At first she had a good appetite and wanted the regular diet, even when her temperature was high, but she was kept upon a liquid diet most of the time. She was given at times repeated small doses of calomel, followed by salines at intervals, to keep her bowels open. Small doses of quinine, one grain, three or four times daily, were given during a large part of the time. In general her treatment was expectant throughout.

On January 28th, at a call of the consulting staff of the Infirmary, the following were present: Drs. Weeks, Bray, Warren, Bradford, Twitchell and Spalding, and later, Drs. Gordon and Cousins. After examining the case and reviewing the history, it was considered to be unique, and, so far as any of them knew, without a parallel in the history of medicine.

The consensus of opinion was that repeated doses of bromide of sodium might be beneficial, and accordingly this drug was given for several days, but it seemed to have little or no effect upon the temperature and lessened the activity of the other functions of the body so much that it was discontinued.

There are several unexplainable things in this case. To the time she presented herself with a gelatinous discharge in the meatus there was nothing unusual in the case. Its existence might be accounted for from the escape of the cerebro-spinal fluid into the ear, where it became dessicated, forming this jelly-like substance that filled the meatus, but this hypothesis can not be sustained by any tangible proof.

The temperature remained about normal for eighteen days after the operation for opening the lateral sinus, on the 21st of December, which could hardly be explained from the conditions found at this operation or the benefits to be expected from it. The temperature remained about normal for fourteen days after the operation for re-opening the

lateral sinus, trephining and exploring the temporo-sphenoidal lobe on the 11th of January, which is difficult to explain. While there might have been more intracranial pressure previous to these operations than in the normal state, intracranial pressure to any extent is not compatible with a high pulse and a high temperature, but rather with a low temperature and low pulse. It will be noticed from the record that the pulse did not vary much from ninety beats per minute, even when the greatest variations took place in the temperature. The respirations were never far from normal. As a point of general diagnostic importance, Macewen says that when a slow pulse accompanies a high temperature it points strongly to an intracranial affection to the exclusion of a general systemic disease, and when it occurs in connection with disease of the middle ear it points to meningitis accompanied by encephalitis or cerebral abscess, but when acute meningitis originates from disease of the middle ear or from infective wound the temperature is high and the pulse is quick.

In phlebitis of the sinuses or infective thrombosis the temperature is high and changeable and the pulse is quick. It is possible that we had to do with a combination of these conditions, hence the operation on the 11th of January was justifiable. The patient was not as sick as we would expect to find one whose temperature was so profoundly disturbed whatever the cause might be, hence every one who saw her was inclined to ascribe an hysterical element to the case, for hysteria is said to simulate all forms of disease. It was very evident there was a profound disturbance of the heat-controlling centers, but how or in what manner will remain a mystery. There is certainly no way of explaining such changes in the temperature by any theory of the production of the temperature of the body. It is perhaps not uncommon to have the temperature markedly different at the same time in one part of the body from that of another part of the body, but it has been overlooked from the fact that the temperature is seldom or never taken in different parts of the body at the same time.

After the patient left the Infirmary her eyes became affected and vision was reduced to one-tenth the normal amount, although the changes in the eyes were confined to inflammation of the conjunctiva and hyperæmia of the retina. Under treatment she recovered normal vision and has left the State. She writes me she has no trouble whatever, has good hearing and sight and considers herself well.

### **\*Iritis and the Importance of its Early Recognition.**

By J. F. HILL, M. D., of Waterville.

**I**N presenting this short paper to you this evening, I assume that knowledge acquired in a special department of practice may be a helpful contribution to the general store. I have, therefore, selected for my subject, "Iritis and the Importance of its Early Recognition."

It is not, however, with the hope of offering anything new on this subject that this paper has been prepared, but rather to provoke a free discussion and call forth a general interchange of views.

Those who are perfectly familiar with the structure and function of the iris will pardon me if I devote a few moments to a brief description of it, for the benefit of those less fortunate.

The iris, called the window curtain of the eye, is a highly organized structure, composed of muscular fibres, pigment, epithelium, and connective tissue. It is richly supplied with blood vessels, nerves and lymphatics; is situated posterior to the cornea and is also a continuation of the choroid and ciliary bodies.

Whenever the lymphatics act together, they become very rich in inflammatory products, and the reproduction of exudative tissue is very great; plastic material is therefore readily produced and easily absorbed.

The iris divides the aqueous chamber into an anterior and posterior part; and, floating in its fluid, gives the most perfect chance for its muscular fibres to exert their force. It acts as a diaphragm, to cut off the marginal rays of cornea and lens, which could not be correctly focused; and the size of the aperture or pupil varies with the quantity of light.

Probably no disease, after infancy, destroys the vision of so many eyes as iritis. Statistics show that conjunctivitis is the most common disease of the eyes, and experience demonstrates that it frequently precedes and is followed by other serious diseases of the eye, the most common of which is iritis.

An eye may have all the appearance of a conjunctivitis, astrigents be prescribed, and within twenty-four hours the inflammation may have extended to the deeper structures, and a well defined iritis developed.

The treatment for conjunctivitis aggravates and increases the inflammation of the

iris; hence the importance of its early recognition, and the application of proper remedies,

*The objective symptoms* of iritis are: change in color and texture of the membrane; pericorneal injection, due to congestion of the non-perforating branches of the ciliary vessels, producing the fine pink zone, surrounding the cornea, known as "ciliary congestion." In the severe cases there may be a distension of the posterior conjunctival vessels, and slight chemosis of the conjunctiva. There will be irregularity and contraction of the pupil, and the reaction to the influence of light and mydriatics is diminished or lost. This tendency constitutes the only formidable danger to be apprehended from the disease; for, unless measures are immediately taken to dilate the pupil, it may not be fully accomplished, as the aqueous is quickly saturated with plastic material and readily glues together surfaces which are already in contact. If, however, a mydriatic is used early, these adhesions, being soft, will give way in most cases. Should these adhesions remain, we have a condition called posterior synechiæ (inflammatory attachments between the iris and capsule of lens). These may be long or short, thin or thick, many or few. The cornea may be clear and its reflex bright, but in bad cases it becomes dull, its surface steamy, with deposits upon its posterior surface. The aqueous humor becomes turbid, which can best be seen by noting that the pupil is smoky instead of jet black.

*The subjective symptoms* are, impairment of vision, which is in direct proportion to the amount of cloudiness which has occurred in the media. Very great impairment of visual acuity indicates that the disease has extended to the ciliary body or deeper structures. The pain, situated first in the eyeball, soon radiates along the branches of the fifth nerve, chiefly the supra-orbital and malar; may be described as dull or sharp, throbbing or cutting in character, always more or less paroxysmal; it is generally worse at night or early morning. Sometimes they complain of pain on the side of the nose and infra-orbital region. The globe is painful to the touch and has a feeling of soreness when moved. Its tension may be normal or increased. A minus tension indicates a complication with cyclitis, and belongs to chronic cases. Intolerance of light and lachrymation are conspicuous features at the outset. Redness of the eye is present at some point in the history of almost every case of iritis. It is perhaps the first sign to appear, while it is certainly one of the last to disappear com-

\*Paper read at the fifty-second stated meeting of the Maine Academy of Medicine and Science, held April 14, 1902.

pletely. One eye may be involved, or both, and either simultaneously or successively. These prominent symptoms of iritis are usually sufficient for the purpose of diagnosis; yet it is not uncommon to find a case of iritis mistaken for some other inflammation, and much valuable time lost.

Variations in the types of iritis make it impossible to establish fixed rules for differential diagnosis, but the following may be of some assistance:

In iritis there is severe brow pain, which is worse at night or early morning, while in conjunctivitis, the eye has a feeling as if there was a foreign body in it.

In iritis there is a dimness of vision, but in conjunctivitis the vision is rarely impaired.

In iritis the pupil is sluggish or immobile, while in conjunctivitis the pupil is unaffected.

In iritis the iris is discolored, but in conjunctivitis the iris is unaffected in color.

A diffuse scleritis has somewhat the appearance in color of the zone of pericorneal injection, more or less characteristic of iritis.

Iritis may pursue an acute course and terminate in from four to eight weeks, or be chronic from its onset and continue for an indefinite time.

The termination may be entirely favorable, the adhesions disappear, and the iris regain perfect mobility. On the other hand there may be more or less complete attachment, causing distortion of the pupil.

Indeed, deposits of exudate may occlude the pupil and lie upon the capsule of the lens. This interferes with the natural action of the pupil, and may be so complete as to preclude the possibility of any circulation of fluid between the anterior and posterior chambers. The posterior chamber would then become distended with fluid and the iris bulged forward, while the pupillary edge is drawn deeply backward and the periphery pushed against the cornea.

In this condition we may get increased tension and secondary glaucoma and even detachment of the retina, unless the communication between the anterior and posterior chambers is restored by an operation.

The causes of iritis are local and constitutional. It may be the result of strain, injury or from operations; but more commonly it is due to constitutional disturbances, such as syphilis, rheumatism, gout, etc.

Iritis is not a disease to be treated expectantly, for its tendencies are toward mischief.

The treatment will depend upon the conditions; all causes must be removed or treated. But let me emphasize this point.

Always begin with a mydriatic, continue with a mydriatic and end with a mydriatic. The prevailing fault is, that this is used with too much caution. Where the pupil is sluggish, it is my practice to use a 1 to 2 per cent. solution of atropin every fifteen minutes for an hour, repeating this plan again every six hours, until I get the result desired, of course watching its effects upon the constitution. Patients may complain of dryness of the throat, but this is not to be considered as dangerous, unless accompanied with a flushed face, a quick and feeble pulse, prostration, nausea or fainting, then the situation is sufficiently alarming to discontinue the atropin. In such cases we have an excellent substitute in scopolamine. We must not expect the full effect on the pupil in the beginning, and if there is great hyperæmia the use of leeches will promote its absorption. The suppression of pain by warm fomentations or dry heat, the recognition of the cause and the use of suitable internal medication and surgical interference, according to the indications, should be attended to.

#### \*FOREIGN BODIES IN THE EYE.

By H. T. CLOUGH, M. D., of Bangor.



THE lodgment of a foreign body in the eye is one of the most frequent accidents to which "flesh is heir," since it is probable that no human being lives to adult age without encountering at some time or other an occurrence of the kind.

Aside from the great discomfort it generally causes, such an accident presents every grade of severity, from mere discomfort only to loss of an eye, and even loss of both eyes, through sympathetic relation between the two. From the frequency of the accident and the serious results which may follow the lodgment of a foreign body in the eye, ought to have unusual interest to all, and when an accident of the kind occurs no trifling be allowed, but the best professional advice obtainable sought.

It is not to be understood that every case of foreign body in the eye is attended with grave danger, for the majority of such cases would, no doubt, take care of themselves if left only to nature, but as no one, not even the physician, is able to foretell what the evil results may be in a given case, if all are regarded as serious and so treated, at least

\*Paper read at the Fifty-second Stated Meeting of the Maine Academy of Medicine and Science, held April 14, 1902.

until the danger period is past, then the bad results which would have followed in the few cases will have been avoided to a large extent, and many eyes saved, while in the cases which would have terminated favorably if left to themselves, much suffering and loss of time perhaps may be averted. Such advice may seem quite extreme to many who are accustomed to regard these accidents trivially, but I wish to cite a few cases—the duplicates of which can be drawn from the records of any oculist which were treated on the trivial plan, and the unfortunate results.

When we are dealing with an organ of such importance as the eye, it seems to me better to have erred a thousand times on the side of caution than once to have endangered an eye from a lack of understanding of the serious consequences which may befall an eye when seemingly but slightly injured.

If the foreign substance is but lodged within the sac formed by the conjunctiva, without having come into contact with the cornea, the danger is slight, unless the substance is of a caustic or corrosive nature, for the conjunctiva is not easily infected by pus-producing germs. If, however, the intruding particle is lodged upon the cornea, or so situated in the conjunctiva as to come into contact with and injure the corneal tissue, then there is danger of this tissue becoming infected, resulting in a more or less extensive ulceration, for the cornea is a tissue of low vitality, and, once infected, easily falls prey to invading germs. After middle life, and with those in feeble health, this danger is greatly enhanced, so that the most trivial causes, such as brushing the surface with an eyelash, may set up ulceration.

A corneal ulcer once started is hard to control, and if controlled will leave an opaque scar, which damages the eye in proportion to the area of scar and its position upon the cornea. In some cases, the ulcerative process is so virulent as to destroy the integrity of the cornea entirely and leave the eyeball in a condition where sympathetic trouble to the fellow eye may arise.

While corneal suppuration is by far the most frequent calamity resulting from a foreign body simply lodged in the conjunctiva or upon the cornea, in some susceptible cases, though no suppuration arise, the irritation is sufficient to set up a severe and sometimes destructive iritis.

Hence we see that in mere surface lodgment of a foreign body grave results may follow. When, however, the foreign substance has gone beyond the surface and penetrated the coats of the eye, lodging in its

interior, the danger is extreme, and the physician is then confronted with one of the most serious problems which can fall to his lot, because very often in such accidents there is little or no positive evidence that the substance is lodged in the interior, and while on the one hand he is called upon to remove an eye which contains a foreign body and threatens the safety of its fellow organ, on the other hand he is restrained from so doing when the circumstances of the case leave any doubt as to whether retention of the foreign substance has actually taken place.

Below are cited a variety of cases showing how seemingly trivial injuries to the eye have been attended by serious consequences. In some of them competent advice would have saved visual power; in all, possibly suffering, anxiety, and loss of time.

Mr. B., a commercial traveler, aged 25, was driving along the muddy road in spring; the horse's foot threw a spatter of mud into his right eye. There followed the usual sensation of getting a foreign substance into the eye, but there seemed nothing unusual about the affair, and by the time he had reached his journey's end only a slight feeling of soreness remained. This had mostly disappeared by the following morning and he resumed his usual duties. Two days later he noticed increasing redness, sensitiveness to light, and pain in the eye, compelling him to seek professional advice. Nearly a week elapsed, however, before it dawned upon him that such advice was needed. At this time an ugly ulcer was present upon the cornea, requiring most energetic treatment for a month to subdue. Even then a scar remained to forever remind him of the accident. Had the gentleman obtained professional advice in the beginning, had the dirt removed, the eye thoroughly cleansed and the eye kept quiet until the corneal abrasion had healed, the chances are that it would have suffered no lasting injury and he would have been saved much loss of time.

Another was the case of a man who was building a fence in the woods in early summer, when mosquitoes and other pests of the kind are so plentiful. He got one of these little insects into his eye, causing him a great deal of discomfort. The little intruder did not immediately come out, as he supposed, and the man kept trying to dislodge it until, after the lapse of some hours, finding that the eye was getting more and more troublesome, he gave up work and went home where the manoeuvres which he had been carrying out for the past few hours were

repeated by members of the household, without avail.

Soon, however, the constant pain gave way to attacks of severe pain, with periods of comparative ease, and in this way he continued for about a week, when he noticed that the eye, which he had not opened much from the first, was quite dim, which observation started him out to seek advice. At this time the eye presented a diffuse keratitis, a condition which was nearly two months in healing, and several months before the eye became strong, though now the eye is as well as ever.

A third case was that of a young man who, while driving a nail, felt something strike his right eye. There was a momentary consciousness of something having struck the eye, but beyond a slight blurring of the organ nothing further attracted his attention until a couple of weeks had elapsed, when he noticed that the eye was sensitive to light and inflamed. Having quite forgotten about the nail incident, the inflammation was attributed to an attack of "pink eye" (whatever that may mean), and this, too, was quite ignored until he noticed the other eye becoming similarly affected, and in a short time getting almost entirely blind. In alarm, his parents now took him and sought the advice which ought to have been given in the beginning, for the poor fellow remains today hopelessly blind.

A somewhat similar case was that of a boy who was cutting tin with shears. He felt something strike his eye, but had so little discomfort following that no further thought was given the incident until the vision in the eye began to wane, and in six weeks from the time of the injury he noticed inability to read or use his eyes in any kind of fine work. An examination of the eye revealed a piece of metal lodged in its interior. A timely enucleation saved the fellow organ.

Still another case was of a lady who was using a sewing machine, and, while manipulating the needle, its point broke off and struck her eye. The metal did not penetrate at all probably, but, being contaminated, it deposited infective material into the wounded cornea, which soon began to ulcerate so malignantly that enucleation of the eye had to be performed. This sad result might have happened under the most appropriate early treatment, but inasmuch as several days elapsed before medical advice was sought, it would seem that the opportunity to save the eye had been needlessly sacrificed.

Thus one might go on citing cases of the

kind to a tiresome extent, but the foregoing are sufficient to show that what may seem a slight accident to the eye may result in its loss, and that no injury is too unimportant to be neglected.

Cases like the following are very common: A man is walking along the street or riding in a car and feels something go into his eye. The discomfort soon passes off in a measure, and he thinks the intruder has come out, so goes about his business. The next day perhaps a little soreness remains in the eye; this condition goes on for a day or two longer, or perhaps a week, when he finds the eye inflamed and very troublesome. An examination of the eye reveals a minute particle buried in the cornea, surrounded by a whitish or brownish layer. This layer is necrotic tissue and constitutes a part of the process by which nature is attempting to throw off the intruder without outside aid. It might be added in parenthesis that in dealing with this kind of an accident the layer of necrotic tissue should always be curetted away after removing the foreign body, otherwise healing will be slow and troublesome.

When a person gets a foreign body into his eye and it does not soon disengage itself and come out, let him lose no time in consulting the best professional advice obtainable, and should the circumstances under which the accident is received make it possible that a foreign body had penetrated the eyeball, even though there be but little disturbance of the eye, a most searching examination should be made, and, if negative, repeated examinations should be made until one is certain of the actual condition. For, contrary to expectation of the uninformed, a foreign body within the eyeball often produces no pain whatever.

Dr. E. M. Fuller, of Bath, in opening the discussion, said:

*Mr. President:*—These papers have all been exceedingly interesting to me, and I wish to refer to a few points. Dr. Holt's case seems to me to be entirely unique. I have never seen anything of the kind, and I have no adequate explanation to offer. I should like to have had an experienced neurologist and a trained physiologist listen to the report of this case, investigate it thoroughly, and then come here and discuss it. It seems to me that disease of the brain itself must be excluded, for the pulse and temperature did not correspond, and the subsequent history and recovery do not bear

out this view of the trouble. It appears more likely to me that there was some disturbance of the vasomotor apparatus, and that this was communicated to the sympathetic nervous system. This case should be more fully worked out, for it is certainly an interesting and unusual case.

Dr. Hill's paper was upon a very important subject, and should make an impression upon every physician, for no practitioner can be engaged in practice for many months without having just such cases to diagnose and treat. For the past ten years I have been surgeon to an iron plant in Bath, and since most of the employees are engaged in working, cutting and chipping on iron and steel with hard tools, I have seen a great many cases of diseases of the eye. I therefore wish to emphasize what has already been said that early diagnosis of diseases of the eye is very important.

I have had a case recently of a man who had had an attack of iritis ten years before and recovered, but recently he got something in his eye and the irritation seemed to light up the old inflammation, and he had another attack of iritis. This patient had quite a severe posterior synechia, which resisted treatment. I would like to ask Dr. Hill how long he would persist in the use of mydriatics for the purpose of breaking up the adhesions, and what he would do if he did not succeed in breaking them up. Also, in syphilitic iritis how long should the mercurials, the iodides and the mydriatics be employed?

In regard to Dr. Clough's paper, I would like to relate a few of my own cases. In the year 1899 I saw 99 cases of foreign bodies in the eye, and one of these patients lost his eye. In 1900 I had 107 cases, and two eyes were destroyed. In 1901, 88 cases, and one eye lost. In three years I have had 294 cases, and four patients have lost an eye. In most of these cases a bit of steel or emery was imbedded in the cornea, and in such cases I not only remove the foreign body, but I scrape out or curet away the necrotic tissue surrounding, as the essayist has advocated. If steel is imbedded in the cornea and it is just removed and nothing further done, ulcer is apt to follow, but if the cut is scraped out carefully no such bad result succeeds.

Pieces of steel and emery are generally red hot when they penetrate the cornea. To remove them I use a six per cent. solution of cocaine, and, as I have said, I scrape out the wound. In mild cases I use a solution of homatropine or scopolamine, and in the severe cases atropine.

Dr. Holt, of Portland, said:

*Mr. President and Members of the Academy:*—I don't know that I had better take up any more time to discuss the other papers. They were both very interesting and important. I endorse all they say, and especially as to the importance of attending promptly to all cases of disease or injury to the eye. As you all know, the eye is a delicate organ, and often an injury that would yield to simple treatment, if began at once, will prove very obstinate if the case is neglected for a few days. A great point in treatment is rest, but after a slight injury this is not always done. Wash out the eye thoroughly, and then put in hematropine; this, with rest, will cure many cases.

The general practitioner, who sees many of these cases, should take no risk of the patient not resting his eyes, but should use a mydriatic in both eyes, and then the patient will be obliged to rest.

In regard to foreign bodies that have penetrated the deeper structures of the eye, I will say that more than twelve years ago, at a meeting of the American Ophthalmological Society, I read a paper and reported several cases in which I had removed steel from an eye by the means of the electro-magnet. This aroused considerable discussion at the time, and many criticised the method by saying that the eye would finally have to be removed, and that there was greater danger of exciting sympathetic inflammation in the well eye. This method has since come into general use, and in my experience I do not recall a case in which sympathetic inflammation was aroused, or in which the eye had to be removed, as a result of the use of the magnet. Other physicians criticized the paper by saying that we were not justified in opening the wound and introducing a magnet unless we could see the foreign body, but my later experience has taught me that the cases in which we can see the piece of steel or iron in the eye by means of the ophthalmoscope are often the hardest cases to use the magnet successfully. I seldom introduce the magnet through the wound, but make an incision at the anterior quadrant, and can then reach all parts of the eye with the magnet.

At first we had only small magnets for this work, but we now have magnets so powerful that they will spoil a watch unless it is removed before using the magnet. In many cases the steel comes out immediately, but sometimes it is so imbedded that a probe must be carefully used to loosen it before the magnet will attract it.



The longer the time which has elapsed between the injury and the operation, the greater the danger of losing the eye, but even after the eye has become infected, often at least a part of the eyesight can be saved.

At a meeting, some time ago, of the New England Ophthalmological Society in Boston, a patient was presented with steel in the eye, and every specialist present was asked what he would do in such a case. Most of them said they would do nothing but watch the case carefully. When my turn came, I said that, with the experience we had all had in such cases, I thought the steel should be removed at once with the electromagnet. It was afterwards reported that the watching plan had been pursued, but that they had watched too long and the man had lost his eyesight.

The older physicians were afraid to remove steel from the eye for fear of exciting inflammation, but this is now done every day with the magnet. I recently had a case which illustrates the old method. A man, while driving up a hoop on a barrel, felt something strike the eye. He consulted several physicians, who looked at it and decided nothing was the matter. Later he came to me for cataract; the lens was removed, but no steel was found in this part, but the magnet was introduced and removed it. I remember another case in which an eye had been injured ten years before. It was necessary to remove it, by reason of dangerous sympathetic inflammation in the other eye. A piece of steel was found in the removed eye, but it was encapsulated.

All over the world, every day, oculists are saving eyes that they would never have thought of saving a few years ago.

Dr. C. E. Norton, of Lewiston, President of the Section, said:

I did not expect to take part in the discussion this evening, but the papers have been very valuable and some of the points brought out are of the greatest importance. Dr. Clough's advice as to the dangers of neglecting even seemingly trivial injuries to the eye has my full endorsement. Every such case should be treated at once and carefully kept track of, for sometimes serious after-results follow. I was greatly interested in what has been said of the use of the magnet in removing foreign bodies. This plan is now in universal use, and our present success with it makes us forget that its use was strongly opposed by many on its first introduction.

Most of these patients with steel or iron in the interior of the eye are sure themselves that there is nothing in their eye. They almost always say that the steel cut the eye and flew off, but they are unable to produce the foreign body. Consequently you may be almost certain that if there is a cut on the eyeball that the steel is inside the eye. It will be hard sometimes to convince the patient of this, but proceed to remove it with magnet.

Some relatively large pieces of steel sometimes enter the eye. The largest that I recall in my own practice was in a case in which I could plainly see the foreign body, but as it turned out I only saw a part of it, for after its removal with the magnet, it measured 5-32x5-32x1-16 of an inch. This piece of steel flew into the eye while the workman was chipping off a boiler bolt.

In relation to what has been said of the necessity of the scraping out the wound. It is the proper practice in some cases, but it is not necessary in every case. After the steel or iron has entered the cornea there will be a circle of inflammation arise quickly. I remove the foreign body and the rust, but I remove as little epithelium as possible. If you remove the tissues below the epithelium you will get an opacity. I have recently seen a case—a merchant—in whose case the physician had removed the subepithelial tissues, probably by repeated scratching to remove the foreign body, and he now has opacities of the cornea along the line of the scratching. The point I wish to emphasize is that I think we should be careful to scrape away only the surface epithelium.

Dr. Hill, in closing the discussion, said:

*Mr. President:*—In answer to Dr. Fuller's questions, I will say, the longer an adhesion has existed the harder it is to break up. In old cases of posterior synechia we give what we call "blow on blow" doses of atropine. Give the mydriatic every fifteen minutes for several doses, and then wait about six hours and then repeat the same series of "blow on blow" doses.

In regard to syphilitic iritis, the important point is to use antisyphilitic treatment and push the remedies. At the same time use mydriatics locally. These patients are apt to get discouraged, for it is generally a long, slow process, and the best you can do they will not be satisfied, but will leave you and consult some other physician.

I recall a case in which a man had been struck on the eye by a snowball. He came to me to get glasses to help his eyesight. I



discovered there was posterior synechia in the injured eye. The adhesions were torn off by "blow on blow" use of mydriatics, but a spot was left on the lens.

#### Further Contributions On Hedonal.

By Dr. B. TENDLAU, Assistant Physician in Moabit Hospital, Berlin.

**I**N a previous communication I briefly reported some experiments with hedonal made in the Moabit Hospital, in the Division of Professor Goldscheider. Since then we have continued the use of the remedy in appropriate cases, and have derived such excellent results that I deem it desirable to place on record my further observations. As mentioned in my previous article, the remedy failed to act in severe insomnia due to intense pains and protracted internal disease, while its most favorable results were obtained in hysteria and neurasthenia. In our later experience this was also true in a general way, but a number of patients suffering from serious chronic affections and severe cardiac disease reacted so favorably to the drug that an attempt to induce sleep with hedonal seemed to me justified and imperative in all cases. In cardiac cases, particularly in which the administration of narcotics should be practiced with extreme caution, we noticed remarkably favorable results; thus, for instance, in a patient suffering with marked myocarditis, with dilatation of the heart and compensatory disturbances. As morphine was not well tolerated, she received on several occasions chloral hydrate, but without any effect, but enjoyed a good sleep after the administration of 30 grains of hedonal. An equally good result was obtained with the remedy in the case of a man who had been the subject of a cardiac lesion for many months, and has suffered from a severe myocarditis following typhoid fever. In this instance, also, chloral hydrate acted very unfavorably, while 30 grains of hedonal was always followed by an agreeable sleep, lasting the entire night. Similar success was observed in an extraordinary severe case of aortic insufficiency, with dilatation of the heart, in consequence of a cirrhotic kidney, and in another case of valvular lesions and myocarditis. In agrypnia, due to violent pruritus, resulting from an erythema multiforme diffused over the entire body, a refreshing sleep occurred after hedonal in 30-grain doses. Smaller quantities produced a satisfactory hypnotic effect in a patient suffering from phthisis pulmonalis,

15 grains being sufficient to relieve the sleeplessness. This dose is still effective after an administration extending over several weeks.

I next tried hedonal with variable effects in various forms of nephritis, in severe cerebral and spinal disorders, in exophthalmic goitre, etc. Although its action was not uniformly satisfactory, and occasionally failed to occur, I frequently induced refreshing sleep of several hours' duration without any unpleasant sequelæ. The least influence was observed in insomnia due to severe pains and marked psychical excitement. But it appeared to me that if administered in connection with morphine, it supplemented the favorable action of the latter. This effect was particularly marked in a case of pulmonary phthisis, with protracted hemoptysis. The patient was a very timid and very excitable girl, who, in spite of receiving  $1\frac{1}{2}$  grains morphine daily, was unable to sleep but for a few hours. If, in addition to the same dose of morphine, 30 to 45 grains of hedonal were given, a deep sleep ensued, lasting the entire night.

Other authors have derived equally satisfactory results from the remedy, and from the literature I would briefly refer to the following. In Professor R. v Jaksch's Clinic at the University of Prague, experiments were made on a large scale by Dr. F. Hepner (*Prag. Med. Wochenschrift*, No. 51, 1901). These demonstrated that hedonal is almost completely free from unpleasant sequelæ, but that its effect is not always constant, unless very large doses, 45 to 60 grains, were administered. The least success was observed in agrypnia, due to severe pain, while in nervous sleeplessness, as well as in several cases of severe internal disease, an excellent effect was obtained from doses of 15 to 30 grains. In the Internal Division of the St. John Hospital, Dr. L. Thaly (*Pest. Med. Chirur. Presse*, No. 41, 1901,) tested hedonal in cases of simple insomnia and that due to cough and pains. In general, good results were noted from doses of 15 to 30 grains. In an Inaugural Dissertation, Dr. H. Schoenfeld gives an extensive review of the literature up to date, supplemented by his own observations. His experiments were made in v Ziemssen's Clinic, and comprised 30 cases of various kinds. The results were most satisfactory in agrypnia not due to severe pains, and hedonal occasionally manifested its action even when other hypnotics, such as trional, sulfonal, chloral hydrate, and even morphine, failed. The doses administered usually ranged from 15 to 30 grains, and rarely 45 grains to 60 grains. Unpleas-

ant sequelæ were almost never observed, although in two instances the effect became attenuated after prolonged administration. *Fortschritte der Medicin*, No. 5, 1902.

### Professor Hermann Nothnagel.

From the *Wiener Medicinische Wochenschrift*,  
Oct. 12, 1901.

**O**N the day after tomorrow, at the First Medical Clinic in Vienna, there will take place the unveiling of a statue of Nothnagel, erected by his disciples on the occasion of the savant's sixtieth birthday. In accordance with the express wish of Nothnagel, the celebration of the event will be private, and strictly confined to the circle of the former and present physicians connected with the clinic; but the entire medical profession of Austria will be present, in the spirit if not in the flesh, at the celebration of the anniversary of a man who has been to them a shining example as a sympathetic teacher, a humane physician, and one of the noblest of men.

Nothnagel today is at the height of his scientific activity, which dates from the year 1865, when he was appointed Leyden's assistant in Königsberg. In 1867 he was Docent at Breslau; in the years 1872 and 1873 he taught in the capacity of professor at the medical policlinic in Freiberg in Baden; later he was Ordinarius in Jena from 1874 to 1882, when he was called to Vienna. His first celebrated work, "Handbuch der Arzneimittellehre," appeared in 1870. This was followed by two essays, replete with original observations: "Topische Diagnostik der Gehirnerkrankheiten," in 1879, and "Beiträge zur Physiologie und Pathologie des Darmes," in 1884. Experimental investigations of the highest importance are contained in these publications, as well as in shorter compositions on the brain, the effect of lightning, temperature-sense, vasomotor neuroses, convulsions, Addison's disease, and the cardiac regulating mechanism. More recently, Nothnagel has written on two modern subjects, "Compensatory Processes in Pathologic Conditions" and "Vascular Pain." Since the year 1894 he has been engaged in editing the great "Specielle Pathologie und Therapie," for which he himself wrote the volume on the "Diseases of the Intestine and Peritoneum." This magnificent work is now being translated into English and published by W. B. Saunders & Company, of Philadelphia.



Nothnagel's imposing and winning personality shows itself in his intercourse with patients, and especially in his relations with students. We shall never forget the morning of the 16th of October, 1882, when he entered the clinic for the first time and delivered his maiden address. The student body had made his acquaintance a few days earlier, in the capacity of examiner. The logical, thorough and scientific manner in which he made six applicants go through the examination of a case of pleural pneumonia, and the meticulous precision with which he entered into the details of the pathology, and especially of the treatment, astonished every one present, and filled those who were sure of their subject with pride, while the exquisite courtesy he displayed toward the candidates, whom he in a sense treated as colleagues, aroused a feeling little short of enthusiasm. We soon learned to love the learned foreigner, whose motto is contained in the words, "If a German is to be really touched by anything, it must strike an ideal cord." The opening words of Nothnagel's lecture contained a reference of respect to the memory of Duchek and Skoda. The change from the idyllic peace of a Thuringian country town to the busy metropolis, he said, and the thought that he was to be the successor of such men as Duchek and Skoda, would be calculated to make him lose courage if he were not buoyed up by his earnest determination to teach his Vienna students to the best of his ability. He then went on to discuss the scope of clinical instruction, which is intended as a scientific training for the

practical branch of medicine. It presupposes on the part of the student the requisite knowledge of the natural sciences, anatomy, histology, morbid anatomy, physiology, general and special pathology, pharmacology and chemistry, and a familiarity with the technic of auscultation and percussion, of ophthalmoscopy, laryngoscopy and microscopy. "You see," continued Nothnagel, "what it is that I mean, and what I wish to bring about; the all-around training of a practicing physician. There is no doubt that the tendency toward specialization in practical medicine is beneficial in the main, because it makes a more thorough study of special subjects possible; it may even be indispensable for the performance of certain technical operations; but this much may be expected from the practicing physician—that he should know enough of the so-called specialties at least to enable him to make a diagnosis and to read the indications." He closed his lecture with the words, which have since become famous; "Knowledge obtains ethical value and true meaning only by being used. It takes a good man to make a good physician."

Nothnagel is more, he is also a great physician. During the twenty years of his activity in Vienna he has enriched the science of medicine by valuable investigations, has rendered assistance to innumerable patients, and has trained a number of able physicians, both from Austria and from abroad; in fact, he has founded a great school. He has become one of us in the highest sense of the word. May he continue his intellectual and didactic work for many years to come. On this, the sixtieth anniversary of his birthday, it is our hope that he may rest for a moment from his weighty labors, to reflect with pride upon his relations to us, to our faculty, to everything that is best and noblest in Vienna.

The memory of many a bitter experience may be softened by the thought that as he was hailed with joy when he was called to Vienna twenty years ago, so he has, through his learning, the brilliancy of his eloquence and his exalted humanity, become the first physician, the first Good Samaritan in the monarchy.

#### Royal Personages and Quacks.

Jefferson points out that royalties have long had a predilection for quackery. Queen Anne's weak eyes, he remarks, caused her to pass from one empiric to another for the relief they promised to give,

and in some cases even persuaded her that they had given her. She had a passion for quack oculists. Happy was the advertising scoundrel who gained Her Majesty's favor with a new collyrium! For, of course, if the greatest personage in the land said that Professor Humbug was a wonderful man, a master of his art and inspired by heaven to heal the sick, there was no appeal from so eminent an authority. How should an elderly lady with a crown on her head be mistaken? Do we not hear the same arguments every day in this enlightened generation when the new chiropodist, or rubber, or inventor of a specific for consumption points to the social distinctions of the dupes as conclusive evidence that he is neither supported by vulgar ignorance nor afraid to meet the most searching scrutiny of the educated? Queen Anne was so charmed with two of the many knaves who, by turns, enjoyed her countenance that she had them sworn in as her oculists in ordinary; one of them she was so silly as to knight. William Reade, originally a botching tailor, and to the last a very ignorant man (as his "Short and Exact Account of all the Diseases Incident to the Eyes" attests), rose to knighthood and the most lucrative fashionable physician's practice of his period. It was true that Sir William Reade was unable to read the book which he had written through an amanuensis, but many wealthy people who listened to his sonorous voice behind his lace ruffles and gold-headed cane, and saw his coach drawn along by superb horses thought him equal in every respect to Pope and Swift. Anne's other sworn oculist was Roger Grant, a prodigiously vain cobbler who had his likeness engraved in copper. He was in the habit of getting hold of a poor person of imperfect vision, whom, after treating with medicines and half crowns, he induced to sign a testimonial to the effect that he had been born stone blind and had never enjoyed any sight until Providence led him to Dr. Grant, who cured him in a little more than a month. Through the usual clergyman's proclivity for quacks, many signed the certificates as witnesses. If they did not, "Dr." Grant himself saved them the trouble by affixing their names.—*Medical News*.

#### Not so Very Busy.

How doth the busy little bee  
Improve each shining hour,  
As in the joyous time of spring  
He flits from flower to flower.  
But busy as the small bee is,  
As he flits on the wing.  
He's never quite so busy that  
He cannot stop to sting.

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PORTLAND, MAINE, MAY, 1902.

## Editorial.

### MEDICAL CHARITY.

A recent investigator, one who took pains to draw his conclusions from facts rather than from his own fertile imagination, has declared in all soberness that more than one-third of all the inhabitants of the great city of New York had applied for charity treatment during the year 1900 at the free hospitals, clinics and dispensaries. While this estimate is undoubtedly too large, it yet shows a zealous endeavor on the part of a very large number of people "to get something for nothing," no matter with what shame to themselves or with what imposition upon others.

Another fact: Every one who has had any experience in the work of medical charity knows well that no free hospital, clinic or dispensary could continue its work one year if it were obliged to pay the attending physicians, surgeons and specialists anything like an adequate salary for the time, skill, and experience, which the medical profession brings to the work. Therefore the *sine qua non* in the management of medical charity is the altruistic spirit of the medical profession, which induces them to give their services free of cost for the alleviation of the sufferings of the worthy poor—those who are unable to pay for such medical attendance,—

and without this donation on the part of physicians no medical charity could continue its work.

In order to be able to devote a part of their time to the services of the worthy poor, physicians are obliged to earn a living for themselves and their families in the same field of labor in which medical charities are at work. Therefore it seems to be patent to all but the blind, that, in the very nature of things, some restrictions should hedge about the bestowal of medical charity. Since there are so many people, even in a civilized, Christian community, undeserving and unworthy, who are always eager to avail themselves of benefits not intended for such as they, and since those who are the principal supporters of medical charity—the physicians in attendance—cannot afford to treat everybody free of charge, lest they themselves and their confreres come to destitution and want, it ought to be apparent, even when viewed in a selfish way, that, while medical charity is an excellent thing, yet the abuse of it will but tend to take the bread from the mouths of those who are most active workers for its support.

Furthermore, for persons able to pay to apply for free medical treatment is both an imposition upon the name of charity and an insult and an affront to the whole medical profession. Medical charity, when bestowed upon the unworthy—those able to pay—serves

but to debase and debauch both the givers and the recipients.

For these reasons, physicians who are engaged in this charitable work are insisting that at least one condition must be fulfilled before free medical treatment, and free bed, boarding and nursing shall be extended, and that is that the recipient shall be worthy, that is, that he or she shall be a poor person who is unable to pay. It requires an immense amount of tact and vigilance to conduct a medical charity without treating the unworthy on the one hand, and without causing offence to the deserving poor in attempts to find out just who are imposing upon both the physician and the charity fund of the institution. In the many difficulties and perplexities of the situation, it is, perhaps, no wonder that some mistakes should be made both in admitting some who are unworthy—those not poor and deserving—and in giving offence by certain requirements, such as expecting a certificate of worthiness from a physician or selectman, in the case of applicants really deserving of free beds. Another cause of dissatisfaction with managers of hospitals lies in the fact that because the State grants an appropriation to our hospitals, some persons seem to conclude from this fact that anybody they recommend should be received into these institutions and granted free bed and free treatment, regardless of whether or not they are worthy of it, and sometimes such persons, if the hospital manager makes any attempt to ascertain whether or not the applicant is worthy of free charity treatment, become enraged and change their role from that of a philanthropist-at-somebody-else's-expense to that of a mouthing, swashbuckler reformer, rejoicing in flapdoodle.

The discovery of anesthesia and the development of the antiseptic and aseptic system of medicine have added immensely to the efficiency and scope of surgery, and have conferred great benefits on the whole human family, but at the same time they have added greatly to the running expenses of hospitals. The endowment of the hospitals of Maine is small compared with the income bearing resources of the hospitals of other States, and, with the prevailing low rates of interest, the funds at command by any hospital in Maine are no more than sufficient to run it, even under the most economical oversight, for more than three months in the year. In order to keep the hospitals of our state in operation at all, the managers are obliged to raise funds in some way to provide for the current expenses of the remaining nine

months of the year. This need is met in every hospital by admitting patients able to pay and charging them moderate rates for room, board and nursing. Even by means of this help, no hospital in Maine is at the present time self-supporting and all are obliged to look for state aid in order to carry on their work of extending free treatment and free board to the deserving poor.

From all the information to be gained on this question, the foregoing seems to be a true statement, approximately, at least, of the financial resources of each one of the Maine hospitals, and as we have already stated, if the medical men of the staffs of these hospitals did not give their services free of cost, that is, if our hospitals were obliged to pay anything like adequate salaries to the attending physicians and surgeons, every hospital in the State would be obliged to immediately close its doors. In the light of these facts, it seems apparent that the physicians of Maine are doing their part towards supporting a worthy charity, for every day in the year they donate a certain part of their time, and such skill and experience as they possess, for the benefit of the poor people of the State.

In return for all this, the medical profession of Maine ask just one concession, and that is, that the name of charity shall not be debased and abused, and that persons able to pay shall not apply for free treatment, but shall pay their way when sick as they do when in health, for thus the much needed revenue of the hospital will be increased, and it will be able to extend its help to a larger number of the deserving poor.

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#### Good Work, Well Done.

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If an epidemic of smallpox should have gained a foothold in our state during the past few months, it would have proved disastrous to the "summer tourist business," and would have kept a large sum of money from coming into our state.

All our natural advantages would have proved of little value in attracting summer visitors to Maine—our hotels and resorts would have failed to pay running expenses,—if this bug-a-boo, a smallpox epidemic, had been able to gain anything like a permanent hold in our midst.

Of all the evils attending smallpox, the money loss is one of the least, for death, sickness and terror have ever followed in its wake, but since in this utilitarian age what touches our pocket touches us nearest and

dearest, it has herein been made the reason for giving honor where honor is due.

To manage an infectious disease like smallpox, to prevent its spread, to stay its ravages, to minimize its dangers, is a task of no mean magnitude, and one demanding skill, vigilance and perseverance.

For these reasons, and for many more which might be enlarged upon, we are sure our people are not unmindful of the very efficient service which both our local and State Boards of Health have rendered us during the past few months. A system, like a tree, is known by its fruits, and the results attained by the officers of the departments of public health have proved both the efficiency of their methods and the ability with which they were executed. A little delay in undertaking the suppression of this very infectious disease, any laxity in the enforcing of quarantine, any swerving from the path of duty on the part of our health officers, would have afflicted us, both socially and financially, and would have spread a loathsome disease, with attending sickness, sorrow and death, among our people. In order to carry out their preventive measures for the general good, the health officers have been obliged, from necessity, to inconvenience many individuals, but individual inconvenience and discomfort are relatively small matters compared to sickness, death and business prostration.

The campaign of the health officers, having been active, aggressive and thorough, has cost money, but sickness, death and business prostration are also very expensive evils. The laborer is worthy of his hire, so long, at least, as he shows fitness and efficiency for his work. The State and municipal health officers of Maine have brought promptness, faithfulness and perseverance to their duties in the face of a great crisis. The people have had faith in their earnestness and ability, and have cheerfully carried out their suggestions, and therefore we find them almost unanimous in their verdict that the campaign of the health officers to prevent an epidemic of smallpox is a good work, well done.

#### A Threatening Danger.

Cholera has appeared amongst the native population of the Philippines, and both the number of cases and the number of deaths is on the increase.

In the natural course of events, the time will surely come when this disease will be communicated to the American army on

duty in these islands, and, since many of the regiments have been ordered home, the disease is almost sure to find its way to the United States during the coming summer.

Though this danger now threatens us, it would be shorn of its terror were it not for the unusual course now being pursued by the municipal authorities of the city of San Francisco. These officials, emulating the example of the ostrich, who considers himself invisible so soon as he has buried his head in the sand, have attempted to prevent the spread of the bubonic plague by the equally foolish process of strenuously and assiduously denying its existence.

Dr. Kenyon, and the other physicians of the Marine Hospital Service and of the local Board of Health, have proved conclusively that many cases of bubonic plague have occurred in the Chinese quarter of San Francisco, and that the disease is still in existence there. The answer of the mayor, and some of his supporters amongst the commercial interests, to this well-authenticated report of competent medical men is a flat denial of the proven facts, and they have proved the courage of their convictions by the somewhat questionable method of causing the removal of all the health officers who, for the sake of the public good, still persist in doing the duty which they are sworn to discharge.

It is unquestionably true that the business interests of San Francisco might suffer for a time, should it become generally known that an infectious plague had gained a foothold there, and that another was threatened, but it would also prove more disastrous to the whole State if other States should, for their own protection, be compelled later on to adopt quarantine measures against them.

To temporize with such diseases as bubonic plague and cholera is, even in a purely financial sense, but to save at the spigot and lose at the bung. In order to stamp out any infectious disease, prompt and decided measures are necessary, and to deny its existence and to hinder and obstruct the efforts of the health officers in locating and isolating the existing cases, must prove a shortsighted and blameworthy policy.

The means in the hands of the health officers of San Francisco—the resources of preventive medicine—are sufficient to control and stamp out any infectious diseases. This has been proved time after time in every civilized country of the globe, but the very first principle in the application of these restrictive measures are that those suffering from the disease, and those who have



been exposed to it, should be known and isolated.

For these reasons, and because the municipal authorities of San Francisco have already adopted the penny wise and found foolish policy in regard to one eminently infectious disease, the bubonic plague, the health officers of other States, and the people of the United States generally, cannot view with anything like complacency the present situation of affairs in regard to cholera in the Philippines.

It is but another step from cholera amongst the native Philippinos to cholera amongst the American troops, and since many of these troops are now on their way home, and more are to follow, this dread scourge is likely to be transported with returning soldiers to San Francisco, and if the city officials of that city should be pleased to adopt the same Fabian policy in dealing with cholera that has characterized their course in relation to bubonic plague, the cholera in the Philippines takes on an added aspect of danger.

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### Reviews.

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**THE DIAGNOSIS OF SURGICAL DISEASES.** By Dr. E. Albert, late Director and Professor of the First Surgical Clinic of the University of Vienna. Authorized translation from the Eighth Enlarged and Revised Edition, by Robert T. Frank, A. M., M. D., with 53 illustrations. Published, 1902, by D. Appleton & Co., New York.

Because few works upon this subject have been written in English, and because of the intrinsic merits of this work, this book is an important addition to medical literature. Professor Albert has had a large experience in this field, and Dr. Frank has succeeded in giving a translation which it is a real pleasure to read. These two qualities combined are rather unusual in a medical book, and will add not a little to its success with American physicians. There is a charm about the book outside of the knowledge which it offers.

The general arrangement of the subjects discussed, grouping them according to similarity of symptoms, rather than according to a theoretical classification, is well calculated to impress the differential diagnosis and makes the lectures more akin to clinical instruction at the bedside. This plan amounts to a systemization of clinical demonstrations. A large number of cases are presented, and, when possible, the reported cases are followed to the operating table, and, at

times to autopsy, thus affirming or correcting the diagnosis.

The book evinces careful study, deep research, and an especial aptitude for the work undertaken. Practitioners, specialists and students will find this volume a valuable addition to the library. The publishers have done their part, paper and type are excellent, and the book is well illustrated.

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**SAUNDERS' MEDICAL HAND-ATLAS. ATLAS AND EPITOME OF OPERATIVE SURGERY.** By Dr. Otto Zuckerkandl, Privatdocent in the University of Vienna. From the Second Revised and Enlarged German Edition. Edited, with additions, by J. Chalmers DaCosta, M. D., Professor of the Principals of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia, etc. Second Edition, thoroughly revised and greatly enlarged. With 40 colored plates, 278 text illustrations, and 410 pages of text. Philadelphia and London: W. B. Saunders & Co., 1902. Cloth, \$3.50 net.

This excellent work, one of Saunders' well-known Medical Hand-Atlases, needs no further recommendation to English-speaking readers than its author's name—Dr. Zuckerkandl. The rules and methods of surgical procedure are stated with the clearness that springs from definite knowledge and the emphasis born of conviction. The operations of modern surgery are described lucidly and tersely, making the book a worthy guide alike to the student and the practicing physician. The verbal descriptions are most accurately reinforced and illuminated by a large number of original colored lithographic plates and text cuts.

In this new edition the work has been brought precisely down to date. The revision has not been casual, but thorough and exhaustive, the entire text having been subjected to a careful scrutiny, and many improvements and additions made. A number of chapters have been practically re-written, and of the newer operations, all those of special value have been described. The number of illustrations has also been materially increased. Sixteen valuable lithographic plates in colors and sixty-one text figures have been added, thus greatly enhancing the value of the work.

We note that the illustrations and description of the methods of osteoplastic resection of the skull are fine. In Krönlein's diagram for cranio-cerebral topography, the line dividing the angle between the Ralandic line and the upper horizontal line does not divide it equally as given in the text, and, if it did, it would not correspond to the Sylvian fissure of the brain, but would be above it, especially at its posterior end. The description



of the operation for opening the cells of the mastoid process and the cavities of the middle ear are good, but necessarily brief in a work that includes general surgery, as this one does.

There is no doubt that the volume in its new edition will still maintain its leading position as a substitute for clinical instruction.

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**SAUNDERS' MEDICAL HAND ATLASES. ALAS AND EPITOME OF OTOTOLOGY.** By Gustav Bruhl, M. D., of Berlin, with the collaboration of Professor Dr. A. Politzer, of Vienna. Edited, with additions, by S. MacCuen Smith, M. D., Clinical Professor of Otolaryngology, Jefferson Medical College, Philadelphia. With 244 colored figures on 39 lithographic plates, 99 text illustrations, and 292 pages of text. Philadelphia and London: W. B. Saunders & Co., 1902. Cloth, \$3.00 net.

This excellent volume, the first attempt, to our knowledge, to supply in English an illustrated clinical handbook to act as a worthy substitute for personal instruction in a specialized clinic, is, indeed, an addition to Saunders' Series of Medical Hand-Atlases.

The work is both didactic and clinical in its teaching, the latter aspect being especially adapted to the student's wants. A special and highly commendable feature is the very complete exposition of the minute anatomy of the ear, a working knowledge of which is so essential to an intelligent conception of the science of otology. As in all this series of atlases, the illustrations are beautifully executed in colors, and illuminate the text in a singularly lucid manner, portraying pathologic changes with such striking exactness that the student should receive a deeper and more lasting impression than the most elaborate description could produce. Further, the association of Professor Politzer in the preparation of the work, and the use of so many valuable specimens from his notably rich collection, especially enhance the value of the treatise. The work contains everything of importance in the elementary study of otology, and, without question, is a most valuable contribution to medical literature.

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**THE MEDICAL TREATMENT OF GALL-STONES.** By J. H. Keay, M. A., M. D. Published, 1902, by P. Blakiston's Sons & Co., 1012 Walnut St., Philadelphia. Price, \$1.25 net.

There are two sides to every question, and therefore there may be a question of whether or not there is a medicinal treatment of gall-stones. Anyhow, the author of this small book has found much to say, both against the usual surgical treatment and in favor of the strictly medical treatment of this disease. The fundamental principles

laid down by Dr. Keay are, first, that the mere presence of gall-stones affords no reason for operation. Second, that of those who suffer, more are cured by medical and hygienic means than surgical. Third, that operation may relieve symptoms, but does not radically cure the disease. In enlarging upon these general principles the author takes pains to emphasize a statement to the effect that operation is certainly the best treatment in a limited number of cases, but after reading his book, physicians will be impressed with the fact that Dr. Keay has been able to make a worthy argument in defense of his position.

What the author says is certainly entitled to consideration, and yet we are not aware that there is any very great difference of opinion in regard to the questions under discussion. Every surgeon who has recently written upon this subject—Kehr, Beck, Robson, Treves, Gumprecht and others—have all admitted that many cases are better treated medically than surgically, and these surgeons would probably find little fault with Dr. Keay's general conclusion that "the mischief [in this disease] lies not so much in the stones as in the migration of stones and inflammatory complications with which they are associated."

The book is well printed and neatly bound, and the price reasonable.

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**INTERNATIONAL CLINICS.** A Quarterly of Illustrated Clinical Lectures and especially prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose, and Throat, and other Topics of Interest to Students and Practitioners by leading Members of the Medical Profession throughout the World. Edited by Henry W. Cattell, A. M., M. D., Philadelphia, U. S. A., with the Collaboration of John B. Murphy, M. D., Chicago; Alexander D. Blackader, M. D., Montreal; H. C. Wood, M. D., Philadelphia; T. M. Rotch, M. D., Boston; E. Landolt, M. D., Paris; Thomas G. Morton, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh, and John Harold, M. D., London, with Regular Correspondents in Montreal, London, Paris, Leipsic, and Vienna. J. B. Lippincott Company, Philadelphia and London. Cloth, \$2.00. Volume 1, 12th Series. 84 illustrations—3 colored plates.

The present is an unusually good volume of a valuable quarterly. Each article is an especially prepared essay by a physician competent for the work he has undertaken.

The subjects treated are timely, and the essays are written in clear and concise language. There are a large number of excellent illustrations scattered throughout the

book, and they serve well to make plain the text.

The volume begins with short biographical sketches of two eminent living physicians, Drs. S. Wier Mitchell and John A. Wyeth. Next follows a series of articles under the head of Therapeutics, the most interesting of these being that of Dr. Horatio C. Wood, Jr., on A Description of the Methods of Investigating the Action of Drugs, and Habitual Constipation, by Dr. I. Boas, of Berlin. Then follow four essays on strictly medical subjects, including Gastrointestinal Auto-intoxication, by Dr. J. C. Hemmeter. Surgery is represented by six excellent articles, and under the head of Obstetrics A. Bossard discusses the subject of The Contest Between the Advocates of Symphyseotomy and the Partisans of Cesarean Section. Dr. B. A. Randall reports a case of Mastoid Disease due to Smallpox.

The Clinics concludes with A Review of the Progress of Medicine During the Year 1901, by Dr. Edward W. Watson, of Philadelphia, which epitomizes in a masterly way the advancement that has taken place.

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## Selections.

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### Gonorrhœal Rheumatism.

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By J. DOUGLAS WESTERVELT, M. D., Shreveport, La.

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The etiology of this disease has for many years given rise to much discussion, without adding any reliable information on the subject under investigation.

The disease is recognized by many able writers as a toxemic effect of the gonococcus upon the general system, either by its presence in the circulation or that of the toxins of this micro-organism. They maintain that the specific urethritis is the local manifestation of the micro-organism, and the accompanying arthritis is a localized product of a general infection. They go as far as to claim that the synovitis is in no way related to rheumatism, and even discard the name under which the disease is generally known, calling it gonorrhœal arthritis instead of gonorrhœal rheumatism. The reasons set forth for such views are, that the articular inflammation concurring with gonorrhœal urethritis is different from that of ordinary rheumatism. These writers seem to ignore what is universally conceded, that the clinical features of a mixed disease are entirely different from the typical features of the diseases forming the complication. The fact

that an articular inflammation associated with gonorrhœa is dissimilar to an ordinary synovitis, furnishes no grounds for believing that these conditions have no inter-relation. It is claimed by the authorities that gonorrhœal urethritis causes the articular disease, and yet they cannot explain its mode of action in procuring the two forms of inflammation. If the pyæmic theory is accepted, why are the joints alone involved? Why are not other tissues invaded? Why is the arthritis sometimes non-articular and sometimes poly-articular? Why should the large joints be more liable to invasion than the small joints. And why is the knee-joint so much more frequently involved than others?

A general pyæmic infection should not be so restricted in its operations. It is claimed, in behalf of the pyæmic theory, that gonorrhœal arthritis does not require for its production the usual exciting causes which invite rheumatic attacks, but can any one name any special exciting causes which invariably give rise to an attack of rheumatism? Gonorrhœal rheumatism occurs most frequently in the early part of middle life, so does rheumatism. It occurs more frequently in males than females; this is also the case with rheumatism. Gonorrhœal rheumatism occurs in only about 2 per cent. of gonorrhœal cases. If the gonococci or their toxins provoke the articular inflammation, it seems strange that they do so in only one or two cases in a hundred of gonorrhœal urethritis. According to the testimony of many trustworthy observers the same forms of articular inflammation have been known to accompany urethritis not produced by the gonococcus. This weakens the theory of pyæmic infection and strengthens the contention by many writers of concurrent rheumatic disease as a dominating factor.

Furthermore, it is very rare to find pyæmia or septicæmia resulting from inflammation of mucous membranes, and if should, other contiguous structures would be likely to suffer as well as the joints.

Is it possible that gonorrhœal pyæmia will produce gonorrhœal rheumatism, and, at the same time, never cause pyæmic disease in any neighboring tissues or organs? It is true that the pyæmic theory is now more generally accepted than any other, but the clinical evidence upon which it rests will not bear a critical examination. It would seem, in the absence of any positive evidence to support the theory of pyæmia, accidental rheumatism as an inter-current complication would be a logical

inference in the determination of factors in gonorrhoeal arthritis. There is much more evidence in favor of this theory than that of pyæmia, but the tendency of most writers to reason from the standpoint of an unwarrantable bias leads them to ignore every argument which refutes the theory of gonorrhoeal inflammation. They claim that the gonococcus has been found in these inflammatory lesions, but they overlook the fact that in the majority of cases it has not been found, and furthermore its presence does not prove it causes the lesion.

The writer does not claim that all cases of arthritis in gonorrhoeal disease are rheumatic, nor that the gonococcus never exerts any provocative influence over the arthritic inflammation. The main contention of this paper is, that the variegated clinical history of rheumatism shows that it is a potent factor in many localized lesions, and there is no justification in a sweeping denial of its relationship to gonorrhoeal arthritis. The symptoms of gonorrhoeal rheumatism during the course of gonorrhoeal urethritis, are a sense of uneasiness, aching, stiffness, lancinating pain in one or several of the joints. The knee is oftener involved than any other articulation, especially the left knee. Other joints may become consecutively or simultaneously involved. The articular inflammation usually develops in the later stages of gonorrhoea, and often after the urethral discharge has almost entirely ceased. The articular symptoms arise gradually without any alteration in the external appearance of the joint. As long as the affected part is at rest there is not apt to be much pain, but the least movement provokes it at once. The inflammatory process is of a sub-acute type, and it never announces its advent with a chill, as generally happens in pyæmic attacks. When the inflammatory attack reaches its culminating point, the joint may become distended and give rise to considerable effusion. The articular inflammation may run an indefinite course and last weeks or months. In these cases, if the effusion is of a fibrinous character, ankylosis may result. In the treatment of this disease we must not lose sight of the fact that we have to deal with a mixed form of disease. We have the gonorrhoeal element confronting us, and we also probably have a rheumatic element to claim our attention. Besides these conditions, we may also be required to treat the general health of the patient. If there is a urethral discharge, it must be treated. If there is a rheumatic condition, it must be

treated. If there is an impaired state of health, this also must engage our attention. The local treatment of the articular inflammation will not differ materially from that of any inflammation of the joints. We must allay inflammation, stimulate absorption of effusions and restore normal functions of the articulation. There are many methods of accomplishing these objects. For the urethritis, we may resort to instillations of Permanganate of Potash, with the internal administration of Cordial of Codliver Oil Compound (Hagee), with five grains of Iodide of Potassium to each tablespoonful of this preparation, a tablespoonful to be given four times a day, after meals and at bedtime. The Iodide of Potassium may be increased or diminished according to the requirements of the particular case. This disease, with its painful accompaniments, has a depressing effect on the vital processes, and rapidly impairs nutrition. The Iodide of Potassium removes the cause of the pain by its eliminating properties, and the Cordial of Codliver Oil Compound improves nutrition, tones up the nervous system, and, by regulating the kidneys, allays the acidity of the urine. With such a constitutional corrective, and suitable diet, and mild anti-septic injections or irrigations, this disease is readily subdued. Besides the general restorative action of the above remedy, it directly increases the excretion of urine and uric acid and renders the urine less irritating to the inflamed mucous membrane of the urethra. This preparation is therefore intended to meet both the rheumatic and gonorrhoeal conditions of this troublesome disease.

It is palatable and efficient in the doses named, a tablespoonful after each meal and at bedtime being the average quantity required for successful results.

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#### The Instrumental Relief of Acute Retention from Prostatic Enlargement.

By WM. T. BELFIELD, M. D., Associate Professor of Surgery, Rush Medical College, Chicago.

The introduction of a catheter for the relief of acute retention of urine from prostatic enlargement is, when intelligently undertaken, entirely free from difficulty; but as frequently performed it becomes a most formidable episode for both physician and patient. Hours of fruitless effort, lacerations of the urethra, serious hemorrhages, immediate suffering, and remote suppuration

in the pelvic tissues, are common features of these cases. These unfortunate experiences, disastrous alike to the patient's welfare and the physician's reputation, are entirely unnecessary; they occur because the physician has an erroneous idea of the obstruction to urination, and therefore uses a metallic catheter.

It seems to be the general impression that the obstacle to urination in these cases is some rigid tissue, similar to an organic stricture; hence that some firm—i. e., metallic—instrument must be used to force a passage. A second dangerous deduction from the false premise is that this metallic instrument should be of small caliber. When called to such a case, therefore, the physician is prone to select a small metal catheter; this is passed into the penis and proceeds without obstacle until the beak enters the perineum. Here the instrument often meets an obstruction (perhaps the narrow opening into the triangular ligament); the physician, believing this to be the obstacle to urination, begins to force the instrument, gently at first, and more firmly afterward. After a few minutes of ineffectual pressure, the catheter is withdrawn somewhat for a fresh trial—and blood flows from the meatus, marking the first false passage. Thus the sanguinary contest with an imaginary enemy is begun.

The fact is that the obstacle to the exit of urine is not a stricture or other firm encroachment upon the urethral canal, but solely an edema of the prostate; and this offers but slight opposition to the entrance of a catheter, although it prevents the opening of the vesical outlet, and thus causes retention. Hence a flexible gum or silk catheter easily overcomes the obstruction.

But the serious objection to the use of the metallic catheter is this; its curve is adapted solely to the passage of the normal urethra, while the urethra traversing the enlarged prostate is abnormal—distorted by the irregular hypertrophied gland. To attempt to pass a rigid instrument with a given curvature through a rigid prostatic urethra with an unknown but probably different curvature is evidently irrational and obviously invites the disaster that so often ensues—laceration of the prostate and failure to find the vesical orifice.

The proper instrument for introduction through a distorted, edematous prostatic urethra of unknown curvature is evidently one sufficiently flexible to follow the unnatural curves without laceration, and yet sufficiently rigid to transmit a certain slight

force from the hand of the operator to the beak. A soft-rubber (Nélaton) catheter sometimes suffices, but often fails because too flexible and soft to separate the edematous walls of the prostatic urethra. The Mercier catheter—also called “prostatic” and “coudé”—most intelligently devised by the noted French surgeon to meet this emergency, may be relied upon to relieve every case of acute retention from prostatic enlargement, unless the urethra has been lacerated by metallic sounds prior to its use. The stiffened, turned-up beak of this instrument hugs the roof of the urethra; as the prostatic tumors (as well as false passages) are usually found on the floor of this canal, it is evident that the Mercier instrument will evade both pitfalls as no other instrument can. Its shaft is sufficiently rigid to transmit the necessary force, yet so flexible that laceration of the urethra is impossible. (The physician should remember to mark the heel of the Mercier so as to identify the direction of the beak after the latter disappears from sight.)

The only cause for failure to introduce the Mercier catheter (aside from tight organic strictures, which are seldom met in these cases,) is the presence of false passages; and even these may be often evaded by a Mercier of large caliber (15 English or more) when the small ones fail. But if the false passages be large and numerous, even the larger Mercier instruments may persistently traverse them instead of the natural channel. In this contingency—and in no other—a metal catheter should be tried; it should be of large caliber, long curvature, and its beak should be controlled and guided by the finger in the rectum. Under no circumstances should it be forced after its beak enters the prostatic urethra; for an obstacle requiring force to overcome it lies outside the urethral lumen, and should be avoided, not attacked.

If no instrument can be made to enter the bladder through the natural channel, an artificial exit must be secured above the pubes. The simplest measure—aspiration—secures relief only for a few hours, and sometimes needs frequent and inconvenient repetition; hence if it become necessary to make a suprapubic puncture, this should be done with a small trocar and cannula. Through the latter a small Nélaton catheter is passed deeply into the bladder; the cannula is then withdrawn, and the catheter fixed in position by adhesive straps and safety-pins. The continuous drainage of the bladder thus afforded can be maintained

until voluntary urination or the introduction of a catheter is accomplished.

To summarize:

1. Acute retention from prostatic enlargement is due to an edema, not a rigid obstacle, in the prostate.

2. This edema can be passed sometimes by a Nélaton, always by a Mercier, catheter.

3. A metallic catheter is curved to traverse the normal deep urethra, and is therefore not adapted to traverse the elongated, distorted urethra of the enlarged prostate. Hence it should be used only as a last resort, and then never forcibly.

It is understood that urotropin or cystogen should be administered at once in all cases of acute retention, and continued until the danger of pus infection of the urinary tract has passed.—*The Therapeutic Gazette.*

#### Watch the Heart.

In treating typhoid fever, pneumonia, or, in fact, any disease in which we have fever or pain, or, in fact, any other symptom which will weaken the heart as it does other organs, the intelligent and conscientious physician will never allow himself to forget the heart. In fact, the modern, well-informed physician has come to regard his duty to "watch the heart" as his watchword.

Now in the management of these fevers we cannot successfully manage the heart by giving digitalis, strophanthus, or drugs of that kind. While seemingly indicated, in fact, they are contra-indicated. Now weakness of the heart in these cases comes from restlessness and sleeplessness in most instances. In fact, it will not be hard to recall a case that has occurred in one's practice where there was a feeble heart to contend with, in which the patient was not restless or sleepless. These two factors are elements which make all diseases worse, and they must receive adequate treatment at the first appearance.

To keep the heart regular as regards volume, no remedy acts more happily than Daniel's Conct. Tinct. *Passiflora Incarnata*. Given in doses of one to two teaspoonfuls every two or three hours, this agent overcomes the restlessness and sleeplessness, and the heart acts less violently, and the pulse will, in a few hours, come down from 140 to 90 and even 78. Restfulness and sleep are great tonics to the heart, and therapeutics has in no way increased the capabilities of the physician, better than affording him a remedy by which he can secure rest and sleep to his patient. By employing Daniel's

Conc. Tinct. *Passiflora Incarnata*, too, we can secure rest and sleep without bringing to our patient the bad effects which are associated with the employment of the opiates. While this remedy is being taken, too, these patients do not suffer with headache, and this trouble, as is well known, contributes greatly to the patient's unrest.

Another point in favor of this remedy is the fact that it is entirely non-toxic.

#### The Dangers to the Public Health and Morals, Especially to Young Persons, from Quackery as Promulgated by Public Advertisements.\*

By WILL B. DAVIS, M. D., of Pueblo, Col.

A quack is "one who pretends to skill or knowledge of any kind which he does not possess."—*Century Dictionary.*

Public advertising does not, of itself, constitute one a quack, in the proper meaning of the term; but, as a rule, the physician who resorts to this method, either begins by pretending an ability not possessed, or early develops into a full-fledged quack, for he soon finds that mere pretense on his part is quite as fruitful of financial returns as the actual possession of all claimed ability. Therefore, the temptation is too great to be resisted by ordinary human natures. With a full quota of the universal desire for gain on the one hand, and a notoriously gullible public upon the other, the doctor who resorts to public advertising at all, usually succumbs, and even pretends to the impossible as well as the attainable. The public is credulous and will believe the unreasonable as readily as the reasonable, at least to the desired end of the quack, which is to induce them to part with their money in the hopes of obtaining relief or cure. Neither may ever be obtained, but the quack is nevertheless as much the greater financially as if they were actually wrought. Nor in event of failure does his reputation suffer in consequence, for he has only a manufactured or claimed one, that is exactly in proportion to his pretensions, and the manner and extent of the public advertisements through which he heralds himself. To cite one instance by way of illustration, and in proof of these assertions, we will take the case of the notorious Gun Wa Company of a few years ago.

I selected this case: First, because of its

\*This essay received the prize of \$25 offered last year by the Colorado State Medical Society for the best essay on the above subject, over numerous competitors.—*Committee on Publication.*

remarkable success, and therefore its great prominence, which was secured through the same means by which all advertising quacks obtain patronage, namely, the use of printer's ink; the degree of success depending both upon amount and judiciousness in its use, and on that alone. Second, I personally investigated the case, and know these representations to be true. Third, the records of the United States District Court can be adduced to prove it.

The head and proprietor of the Gun Wa combination was the owner and manager of a gambling house in Pueblo, Col. He had in his employ, in the capacity of general scrubber and spittoon cleaner, a Chinese coolie, on a salary of \$3.50 a week. Being a shrewd schemer, and knowing the gullibility of the public, he conceived the idea of dressing this Chinaman in the most imposing oriental garb, and advertising him as the celebrated Chinese doctor, "Gun Wa." In twenty-four hours, after last scrubbing the floor of the gambling den, this great and only Gun Wa was in Denver, 120 miles north of Pueblo, attired in full oriental costume, and occupying most gorgeously furnished office apartments, posing as a great and just-arrived Chinese physician. His expected coming had been heralded through the press of Denver and other cities most profusely, and his ability to cure all manner of diseases was pretended to be so great, that the spacious waiting-rooms of the coolie laborer were filled to overflowing, long before the beginning of his regular office hours.

Gun Wa held undisputed lead, at Denver and other places, over all advertising quacks for some two years or more, because his manager spent more money for advertising than all competitors, and we were reliably informed that it was no unusual thing for his daily office receipts to run up into the thousands. Yet he displayed the magnanimity, mainly because he had no diploma or examination certificate, to give examinations and advice free, only charging for the medicine furnished. During his short professional career he was probably the most thoroughly advertised quack ever known. But he was only a tool in the hands of his manager and owner, who was certainly an adept as an advertising agent.

But the business grew so prosperous in a little while in Denver, and so many people came from a distance to consult the great Mongolian, that it occurred to this enterprising gambler to "Gun Wa" Omaha, Dallas, Salt Lake City and San Francisco.

So, keeping one Gun Wa in Denver, whether the original or not is of no moment, he hired as many other Chinamen as he needed, and it was not long until Gun Wa was everywhere, at one and the same time. The thing was finally so overdone, the one and only Gun Wa was doing business and was personally present at so many different places, and in so many different states, at one and the same time, and so freely using the United States mails to further his ends, that the Federal authorities took the matter in hand and suppressed the omnipresent Gun Wa. But the laws of Colorado, Nebraska, Texas, Utah and California were impotent; and had Gun Wa not appeared in person in so many different states synchronously, nor infringed upon the postal laws of the United States Government, he might, until now, have been holding forth in all his whilom glory, at Denver, or at any other town in any other state in this country.

It is scarcely worth while to comment further upon this case, yet one can hardly avoid some few reflections. Think of the hundreds and thousands, and among them many of the most intelligent people from different states, who, during the prevalence of the Gun Wa mania, thronged the offices, and would sit for hours in the reception-rooms of this almond-eyed coolie, waiting their turn to be ushered into the august presence of the so-called great Gun Wa, conceived and born for their special regalement in the resourceful brain of the enterprising gambler. Though visited by thousands upon thousands during his halcyon days, and at that time in the thoughts and upon the tongues of everyone who had an ailment, it would be difficult now to find a baker's dozen who would acknowledge having been taken in by this egregious fraud.

What induced them to do it? Certainly not any real benefit ever obtained by anybody in fact, for the truth of the matter was, as is now well-known, that this so-called Chinese doctor was totally ignorant of any and everything pertaining to medicine, occidental or oriental, and that the so-called medicines dispensed were nothing more than inert powders.

Nothing under the blue canopy of heaven induced them to do it but the pretended knowledge and skill promulgated through public advertisements. There is absolutely no ground for any other conclusion. The degree of pretended knowledge and skill as made known most volubly and profusely through advertisements in the public press



was simply unbounded. Certificates of miraculous cures were obtained galore from all classes of people and published with a liberality that constituted the Gun Wa enterprise a regular bonanza to the newspaper men.

It is an unhealthy state of affairs when all manner of false pretenders are so facilitated in their nefarious schemes, and it presents a dark picture upon the social canopy of every community, more especially when we consider that it is done by authority, and under the protection, of the laws of our land, abetted and encouraged by the secular and religious press of the country. To show the comparative value of the press as an advertising medium, we can do no better than quote the language of that able writer, Charles Hopkins Smith, of the Hartford, Conn., *Courant*, who, in a lecture recently delivered by him on "How to Make a Newspaper," said: "Imagine yourself agent to canvass Hartford for the sale of any article, however desirable. How are you going to get at the public? Mail them circulars, and the postmen groan and the waste baskets in our ten thousand homes give each a weary yawn, and the circular disappears unread. Call upon people and explain the merit of your wares? How are you going to get in? The sign, 'Our Busy Day,' hangs in big letters in business offices; in private houses you must ring the bell. Oftenest you are turned away. If you get in by any shrewd excuse, you cannot get beyond the hall or reception-room. You are quietly watched there in the interest of overcoats and umbrellas, and when you explain your errand you are speedily restored to the outer air. But put a cleverly worded advertisement of those same wares in a newspaper that has an established circulation in the city's homes and business houses and see what happens. You couldn't get in there yourself, but your advertisement is there on the breakfast table, in the library, in the parlor, in the sewing-room, and when everybody is inquiring for the paper which can't be found, it is very likely doing duty on the quiet in the kitchen. It is all over the house and wanted there. You were not. Similarly at the office it is read and re-read, and part of the use of the 'Our Busy Day' sign is to get the chance to read the papers. The advertisement thus started is taken right into the family life and business life."

Taking a fair survey of the whole field of quackery, there is no phase of it that is so far-reaching in its dangerous effects upon the public morals as that branch of it that

is promulgated through public advertisements. In his multiform ways of attracting public notice, the advertising quack is peculiar. He does not scruple to resort to any scheme or method to call the public's attention to himself or his nostrums. By the flaming handbill or poster, the leaflet or pamphlet, or by aptly-worded advertisements in the secular or religious press, he obtrudes himself upon the notice of everybody, and too frequently in manner and language not fit for the eyes of any decent man or woman. I will only consider one of the many hobbies of the advertising quacks, but one of their many chimeras of disease to catch the unwary, namely, that one familiar to all which they refer to in flaming headlines as "lost manhood." Who has not read such advertisements, both in the secular and religious press, and in such papers seen something of their description of the symptoms and results of "lost manhood," caused by what they claim "self-abuse" or "early indiscretions?" Now, what is there to call this forth? Simply that the exceptions are rare in which young men have not committed self-abuses to a greater or less extent. These matters, I confess, belong to the "unmentionable errors of life," which I would more than gladly ignore in this paper could I do so in justice and honesty, but the importance, nay, I might say sacredness, of interests at stake will permit of no such nicety. It will be enough for me to say that those of the medical profession whose lines of practice constitute them the best judges are of the opinion that self-abuse is very widely practiced. This fact the astute advertising quacks know also, and grasping the situation they utilize it for all it may be worth to their business, not for the good of the erring, but to the unholy ends of money-getting, even though they may incidentally injure, perchance ruin, their victims.

There is scarcely a person whose physiologic or healthy existence has not occasional interruptions, either from dietary indiscretions, physical and mental overtax, or from exposure to unhealthy atmospheres or surroundings. The symptoms of any and all such passing indispositions are carefully described by these advertising quacks, and falsely charged to the account of self-abuses, with familiar comments upon what they will lead to if the sufferer does not early seek the one and only cure, the secret remedy of the particular quack so advertising. The young man sees these advertisements. He, in fact everybody, has some of the symptoms described, at least at times. He begins to



reflect upon his "early indiscretions," and knowing himself to be thoroughly guilty, is easily led to imagine himself a sure victim of "lost manhood." He writes to the advertising quack—most usually under an assumed name, for purposes of secrecy (for he is ashamed), and the specially prepared literature follows. He reads the chimerical stuff that is forthcoming, and continues to brood over his condition. He compares his symptoms with those which the advertiser so cunningly describes as due to self-abuses, and becomes convinced that he is thoroughly in the toils of "early indiscretions." He boldly enters the gilded parlor, so to speak, of the professional spider, and, though he does not realize it, every effort of promised relief only further entangles him in the astutely woven web of the moral aranea. If any are doubtful of the truth of this, let them take up a secular or religious paper containing such advertisements, open a correspondence with the advertiser, who usually promises a free treatise on the subject, read all the literature which he will furnish them from time to time, and then stand forth, if they can, in denial of these statements. I think after such personal experiences, and that is the only fair way to investigate it, any skeptic would be ready to exclaim that the half had not been told, that the facts had been understated rather than overdrawn, and that no language or combination of languages was sufficiently rich in descriptive adjectives to anathematize too severely the professional turpitude of these moral perverts.

If every parent in this country could be made to fully realize what they are aiding when they admit to the family circle the average secular and religious papers of the day they would stand aghast at their own stupidity. Though ever so careful of the associations and indulgences of those whom God has entrusted to them, they frequently are guilty of placing in their hands, from day to day and week to week, enough satanic venom, only hidden by thin veneerings of a pretense at decency, to thoroughly nullify the consummation of all such parental hopes. Their studied efforts to protect their children from a precocious knowledge of the unmentionable filths of life "gang aft agley" before the daily and weekly advertisements contained in the secular and religious papers which they admit to their family firesides.

Once thoroughly in the toils, it is hard to reclaim a young man from the thralldom of quackery, for having been led by these press advertisements to clandestinely correspond with the quack doctor, he is thor-

oughly convinced, from the literature conveyed to him from time to time, that he is truly a victim of various private ills. This would be the case even though the parents ascertained the cause of their child's decline, which they rarely, or never, do.

It is the common experience of the regular profession to find it difficult to convince the young man who has once fallen a victim and prey to these medical sharks, of his mistake, and dissuade him from further following them in their wily methods of maintaining their hold upon their subjects; these masters, who, by shrewdly playing upon their guilty imaginations, continue to further injure and drain them of their money. These remarks only hint at some of the most extreme injuries wrought by the advertising quack in his unbridled efforts to entice his victims into the labyrinths of delusion for the sole and only purpose of rendering them willing and easy prey for prolonged and continuous robberies. The quack whose advertisement is in the daily and weekly papers, secular and religious, which the parents placed in the hands of their own child, is a monster of injury to, and in some cases the utter ruin of, untold numbers of the youth of the United States of America alone. God only knows the full measure of harm that is being wrought everywhere by these multidamnable excrescences.

We may analyze this subject *ad nauseam*, and speculate upon remedies *ad infinitum*, but when resolved into its component parts, we will find that we have money and money-getting pitted against the morals and health of the community. Upon the money-getting side there is the advertising quack, the secular and religious press, together with all persons, in high places or low, from the ecclesiastic with a large cargo of pseudo-piety to the obscure prostitute, from United States Senators and Representatives, and governors of the states, to the hod-carrier and washerwoman of the land, who, in exchange for a little money, will give certificates laudatory of the wonderful curative powers of the nostrums of the advertising quacks. The scriptural aphorism, that "The love of money is the root of all evil," is strikingly apt here. It is the desire for money-getting that induces the advertising quack to embark in the enterprise; it is the money paid by these quacks which induces both the secular and religious press to give a space in their advertising columns to these pretenders, and it is money which buys the so-called certificates of gratitude, so pictorially published, from the high officials and so-called

ministers of the gospel down to the poor washerwoman.

On the other side we have the youth of the land, whose health and morals are in continual menace and jeopardy from quackery, as promulgated by public advertisements. Thorough and drastic legislation in every state in the Union is the only remedy to limit and control such impositions. The question is how to get this. I was recently told by a non-medical friend that only a few years ago the physicians of the State of Massachusetts raised a campaign fund among themselves of some \$20,000 for the purpose of securing needed legislation to limit quackery as practiced in that state. But the result was, that when the committee on legislation arrived at the assembly halls, they met an opposition committee, backed with \$250,000, subscribed by quackdom.

Always bearing in mind the predominant fact that the fight is between money and money-getting on one side, and the public health and morals—especially of young persons—on the other, and carefully reviewing them all for points of vantage in a campaign of education against the cohorts of quackdom, there is nowhere that we can so safely hinge our *point d'appui* as in the hearts of the honest and educated physicians of the land.

It is the duty of every true physician to work actively in the cause, and, by every means in his power, endeavor to teach the individual, as well as the public, "the dangers to the public health and morals—especially to young persons—from quackery as promulgated by public advertisements."—*American Medicine*.

#### Clinical Observations on Amenorrhea and Dysmenorrhea.

By F. DEVASSEUR, M. D., New York.

Perhaps no subject in the whole range of the diseases of women is of such interest to the general practitioner as the two types of menstrual disorders that are usually grouped under the designations of amenorrhea and dysmenorrhea. While it is the purpose of this paper to consider especially the treatment of these conditions, we must remember that no rational therapy can be adopted without a thorough apprehension of the etiology of the affection to be treated. Although this principle holds good in every morbid condition, it is especially true of amenorrhea and dysmenorrhea, for these disorders may arise from so many different

causes that nothing short of a thorough general and local examination will reveal the true basis of the trouble in individual cases. It behooves us, therefore, before passing on to the subject of treatment, to consider somewhat in detail the etiology of amenorrhea and dysmenorrhea.

#### AMENORRHEA.

*Causes.*—Amenorrhea is the pathologic absence of menstruation. Hence the absence of the menstrual function during those periods of life when such absence is physiologic—before puberty, during pregnancy and lactation, and after the climacteric—does not come under this definition. The term suppression has been applied by many writers to temporary amenorrhea—*i. e.*, to absence of the menstrual function for a limited period of time. We think it is more rational to apply this term only to the interruption of the menstrual flow during a period.

If amenorrhea be defined as the absence of the menstrual function, not of the menstrual flow, then we should also exclude cryptomenorrhea, or retained menstrual blood as a result of an atresia in the genital tract, from the classification. We mention this condition under the causes of amenorrhea because it is usually spoken of in connection with the subject of menstrual anomalies. The causes of amenorrhea may be tabulated as follows:

I. ORGANIC: (a) *Congenital*:—1, Absence of ovaries or uterus, or both; 2, rudimentary uterus or ovaries, or both; 3, atresia of the genital tract (cryptomenorrhea). (b) *Acquired*:—1, Degeneration or malignant disease of the ovaries; 2, metritis and endometritis; 3, atrophy of ovaries or uterus; 4, pelvic peritonitis; 5, atresia of cervix or vagina; 6, removal of both ovaries or uterus.

II. FUNCTIONAL:—1, Sudden mental or physical shock; 2, change of climate or of mode of life; 3, reflex neuroses; 4, exposure to cold and wet (suppression); 5, without discoverable cause.

III. CONSTITUTIONAL:—1, Chlorosis; 2, other varieties of anemia; 3, chronic wasting diseases, especially tuberculosis; 4, acute infectious diseases; 5, diabetes, mellitus and insipidus; 6, splenic leukemia; 7, obesity; 8, myxedema; 9, acromegaly; 10, Addison's disease; 11, exophthalmic goitre; 12, morphinism; 13, alcoholism; 14, nervous and mental disorders—*e. g.*, chorea and general paresis.

The prognosis of amenorrhea depends upon the cause. A number of causes are irreparable—*e. g.*, absence or atrophy of the ovaries

or uterus, cancerous growths, etc. Among the constitutional causes the anemias are the most favorable, and the less well-known diseases, such as diabetes, acromegaly, etc., the worst from a prognostic viewpoint. It is possible sometimes to restore the slumbering ovarian function by stimulating treatment when a portion of the ovary has remained unatrophied. In amenorrhea due to acute disease the prognosis is favorable, for the menstrual function generally returns after convalescence.

#### DYSMENORRHEA.

*Causes.*—Dysmenorrhea means menstruation accompanied by pain. As many women have perfectly normal menstruation accompanied by a certain amount of pain, it is difficult to draw a sharp distinction between normal and pathologic conditions here. Pain is such a variable quantity and depends so much upon the personal equation that one cannot always say with certainty that one patient has more pain than another. The pain of dysmenorrhea is primarily in the uterus, ovaries, and adnexa, but it is often referred to various other regions of the body at considerable distance from these organs.

Thomas gives a most convenient working classification of the causes of dysmenorrhea. He distinguishes five varieties: 1, neuralgic; 2, congestive or inflammatory; 3, obstructive; 4, membranous; and 5, ovarian. This last group I would include in the second class, as it depends upon a congestion or inflammation of the ovaries. On the other hand, two new types of dysmenorrhea which have recently been described must be added to this list. The first is the reflex dysmenorrhea of Fleiss and others, the second the atrophic dysmenorrhea of W. A. Freund.

A few words concerning the nature of these groups will suffice for the present purpose. The inflammatory type depends upon congestion or inflammation of the uterus, ovaries, tubes, or pelvic peritoneum. The most important inflammatory condition leading to dysmenorrhea is corporeal endometritis, acquired as a result of uterine infection, malposition, etc. Adhesions due to perimetritic inflammation may cause menstrual pain. Chronic, latent oöphoritis, accompanied by swelling and tenderness of the ovaries, is also a prolific cause of this type of dysmenorrhea. In such cases the pain is more continuous and not so identified with the menstrual period itself, and it is more localized in the ovarian region.

The *prognosis* of dysmenorrhea, like that of amenorrhea, depends upon the cause. Neu-

ralgic cases are often troublesome. Membranous cases are the most hopeless, but the remainder can usually be cured by the proper treatment.

#### TREATMENT OF AMENORRHEA AND DYSMENORRHEA.

It is not my purpose to give here the treatment of all the varieties of these affections in detail. I will confine myself to the enumeration of the various procedures employed, and will dwell particularly on the treatment employed by me in a class of cases frequently met with in general medical practice.

The treatment of organic amenorrhea is chiefly surgical or mechano-gynecologic. In many cases, such as those in which the ovaries are absent, even surgery will accomplish nothing so far as restoration of the menstrual function is concerned. In cases of rudimentary ovaries, various methods of stimulating the dormant activity of these organs have been employed with more or less success. Among them are electricity, ovarian extract, and sexual activity in marriage; massage, gymnastic exercises, change of climate, passing of uterine sounds and stems, and methods calculated to increase ovarian and uterine congestion, such as hot vaginal douches, foot baths and sitz baths, scarification, and the application of leeches to the cervix.

In functional and in constitutional amenorrhea the treatment consists in avoidance or removal of the cause and in the administration of emmenagogues. Of these I shall speak, in connection with my cases.

In dysmenorrhea, if dependent on organic causes, the appropriate surgical or mechanical procedure must be resorted to. In desperate cases castration has been deemed necessary. In purely functional cases the two indications are the relief of pain and the administration of emmenagogues to relieve the uterine congestion. The relief of pain is accomplished by one or another of the analgesic drugs. Morphine is, of course, to be avoided so far as possible. In addition, the use of hot packs about the pelvis and other means of applying heat are also very popular in the acute paroxysms of pain which characterize dysmenorrhea.

The list of emmenagogues is very long, but many of them are unsuited for use in amenorrhea or dysmenorrhea, because of their inefficiency or because of their harmful effects. After trying successively manganese dioxide, potassium permanganate, ergot, aloes, oil of savin, apiol, and numerous other

drugs of this class, the writer became convinced that the four last-named drugs, particularly apiol, may be considered as the most efficient, and, in proper doses, the least harmful of their class.

Apiol is perhaps not so well-known as it deserves to be. It has gained considerable popularity among French and English physicians, and has been introduced into this country some years ago. At first it was recommended for malaria, as a substitute for quinine, but later its emmenagogue virtues became known. It is the active principle of *apium petroselinum*, L., or of *petroselinum sativum*, and was first isolated by Joret and Homolle in 1855. The apiol of the market is usually full of resinous impurities, and, therefore, not suitable for administration. Indeed, the many failures to secure the emmenagogue action of apiol which physicians in this country heretofore experienced were chiefly due to the fact that the apiol usually sold as such was, in reality, a mixture of impure principles obtained from parsley by a simple process of extraction. In the cases reported here I employed the preparation called Ergoapiol (Smith), which contains a combination of pure apiol, ergot, oil of savin, and aloin in capsules. The histories of these cases are briefly given here. I will say in general that in all these cases emmenagogues were indicated and organic changes in the genital system excluded by examination. In addition to the cases reported below, I have used Ergoapiol (Smith) in eighty others, with results similar to those described here:

CASE 1. Miss C. R., aged 15 years, menstruated for the first time five months ago, and only once since then has had any indicating pains, and these without any flow during the month following the first menstruation. After treating her with iron, arsenic, etc., including douches and hip baths, without any apparent effect, I tried the Ergoapiol (Smith), giving her one capsule four times a day. On the fourth day I found that menstruation had been established, a slight pain remained, which disappeared after a warm hip bath, when the entire function became normal.

CASE 2. Miss E. M. (nurse), aged 27, unmarried, suffered greatly at the menstrual period. I had used in her case many of the preparations recommended for dysmenorrhea, with poor success, and she had become convinced that only large doses of morphine with inhalations of chloroform, which she had been employing for some time, could give her relief. I prescribed two capsules

four times a day for two days, and one capsule four times a day during menstruation. The periods now occur without the slightest discomfort.

CASE 3. Mrs. D. S., aged 27, family history good, came for treatment October 10th; she had not menstruated for three months, no pregnancy existing. Diagnosis, nervous amenorrhea. Treatment was begun with two capsules four times a day for three days, then continued with one capsule three times a day. On the fifth day menstruation began slightly, and two capsules were administered three times daily until the sixth day, when the function was well established. In the month of November, two days previous to the menstrual period, one capsule was given as a precaution, three times a day for two days, and followed by normal menstruation.

CASE 4. Mrs. H. S., aged 32, married twelve years, suffered every month with dysmenorrhea, and gave history of scanty menstruation since birth of her child, three years ago. I prescribed one capsule every four hours for three days before her period, and continued with one capsule three times a day during menstruation, which passed with comparative ease with a normal flow. A month later the patient repeated the previous treatment with the same good result.

CASE 5. Miss A. T., aged 25. Dysmenorrhea, with very offensive discharge. She was suffering with severe pains before and during menstruation. One capsule was given four times a day just previous to the expected period. The menses appeared without pain and with comparatively little odor, and menstruation became more nearly normal than it had been for several months.

CASE 6. Mrs. N. P., aged 24, multipara, had not menstruated since confinement, a period of twenty-two months. She had tried various emmenagogues, but without result. After taking two capsules three times a day for a few days, menstruation was re-established in a perfectly normal manner.

CASE 7. Miss O. R., aged 18, single, had been treated for syphilis for past six months, during which time she had had severe pains, with scanty flow, during her monthly periods. Her physician had prescribed various remedies, but without success. When she came to me she had passed her menstrual period for five days and had pain and fever associated with nausea. I prescribed Ergoapiol (Smith), directing her to begin at once with two capsules four times a day, and, in order to avoid any further stomach disturbance, I ordered a

glass of milk with the capsules. On the third day the menses appeared without pain and almost normal in amount.

CASE 8. Miss F. R., aged 28, had always suffered with severe backache and pains in the abdomen for two or three days before and during menstruation, which usually lasted four to five days. Her health in every other respect seemed perfect. Patient had been treated without success with usual remedies in such cases, including the "green apiol." The cervix was also dilated on two occasions without relief. I directed her to begin two days before the expected period with one capsule four times a day (two capsules three times a day during the first twenty-four hours). The menses appeared on the third day without any pain, and she continued to take one capsule three times a day during the remainder of the period, which closed on the second day. During the following period the patient repeated the treatment of the previous month, with more marked relief.

CASE 9. Mrs. E. B., aged 29, married four years, no children, had suffered every month with dysmenorrhea and a somewhat fetid discharge. Her agony was so intense that she was obliged to remain in bed for about two days at each period, and had acquired the habit of taking large doses of paregoric, Hoffman's anodyne, and viburnum extract with very little relief. During one of these attacks I was called in, and after quieting her with one-quarter grain of morphine, hypodermatically, I prescribed two capsules four times a day until menstruation had ceased. On the following day I found my patient more comfortable, having only a slight pain, and on the third day I found her quite well. She reported that during the last two days of her menstruation she had been better than during any menstrual period within the last four years.

CASE 10. Mrs. E., aged 20, married six months, complained of scanty and retarded menstruation. She had always been more or less irregular and had suffered with considerable dysmenorrhea. At her last two periods, under the administration of one capsule four times a day, the menses appeared regularly without any distress.

CASE 11. Mrs. H. J., aged 22, married two years, had been troubled with menstrual irregularity since her employment in a department store, four years previous to her marriage. She was more regular during the few periods following confinement, but later her menses became more irregular and painful than at any time before. Two months

ago she came to me with suppressed menses, the result of exposure and shock received through the upsetting of a sailboat. I made an examination, but found no signs of pregnancy, and directed her to take two capsules Ergoapiol (Smith) four times a day until some indication of a return of the menses. I told her to continue with one capsule three times a day until menstruation had ceased. She reported to me on the fifth day that the flow had reappeared in abundance and without pain, saying that she felt in unusually good health. I instructed her to take one capsule three times a day two days before the next period, and to continue in the same way, if menstruation appeared, until it ceased. She has since reported that the capsules brought about the same result as in the first month.—*International Journal of Surgery.*

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#### THE ALIEN INSANE.

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A matter that is receiving more and more attention from those who are acquainted with the conditions prevailing in institutions for the insane, for idiots and epileptics, is the disproportion of the alien-born to the native-born who are imposed upon the charitable care of the government. The statistics of the last census bearing on this subject are not yet available, but those of the census of 1890 revealed a state of things that suggested the need of some defensive measures. They showed that, while the proportion of native-born citizens to foreign-born in the whole population was 84 to 16, the proportion of the insane of the two classes cared for in public institutions was, respectively, 65 to 35. That is to say, the proportion of foreign-born insane in our public institutions was more than double what it should be in consideration of the proportion of the foreign-born to the whole population. In the state of New York a similar disproportion is noted. While the foreign-born population of the state is but 25 per cent. of the whole, the number of the foreign-born insane in the state institutions is 50 per cent. of all. Here in Massachusetts, according to the census of 1895, the proportion of the native-born to the foreign-born population is 69.41 to 30.59, while the proportion of native-born insane in the state institutions to the foreign-born insane is 60.40 to 39.60. It appears, therefore, that, while the foreign-born population here supply much more than their proper share of such wards of the state, the disproportion is not so great as in New York, or as in the country as a whole.

Facts of this kind have caused it to be thought that stricter regulations than now exist respecting immigration ought to be adopted. The matter is sufficiently important in the item of expense alone to make it worth consideration: for, according to careful estimates, the public burden on account of the excess of alien insane amounts to not less than \$10,000,000 annually, exclusive of the cost of buildings rendered necessary. In New York alone the cost and care and treatment of these is said to be \$1,000,000 a year, and \$3,000,000 has been laid out for buildings for their accommodation. The case in New York is worse than in other states because New York city is the chief port of arrival of immigrants. It should be stated that the figures given above do not include the idiots and the epileptics, who should also be considered. The matter of expense, however, is not the only one demanding consideration. The transmission by inheritance of traits of mental defect and disease is also a matter which the state may properly guard against by preventing the coming into the country of persons who, being sufferers themselves, are liable to add by their offspring to the mentally defective, and probably to the criminal, classes.

At the last session of Congress, the New York State Commission of Lunacy, with the support of Gov. Odell, procured the introduction of a bill amending the immigration laws in respect of these matters. The bill met with favor, and was unanimously reported from the House committee on immigration. The Secretary of the Treasury cordially approved the measure in a letter to the speaker. The bill was not acted upon, but it will be introduced in the next Congress, when it is expected to have the support of the United States Industrial Commission, to which the matter has been presented. While undoubtedly the State of New York has a greater interest in the matter than any other one state, it is a subject that concerns the whole country to such a degree that it would seem to deserve general favor and support. We believe that those who know most about the evils that are suffered and entailed are convinced that something effective should be done in the way of prevention.

The proposed changes in existing laws are not radical or revolutionary, but conservative. They are chiefly an extended application of principles already recognized in the law and regarded as essentially sound and just. The law now requires the return of an insane person to the place from which he emigrated within one year, if it can be shown

that the insanity, idiocy or epilepsy developed is the result of causes which arose prior to departure for the United States. The time is too brief. It is desired to extend it to two years, and to require the return within that period, unless it can be shown that the insanity or other condition is due to causes which arose after arrival in this country. There is, we understand, a case in this state where an immigrant has become insane, the condition of the afflicted person being such that, with due regard to humanity, it is improper to attempt a return at once. She is under treatment. If she improves sufficiently to be returned, she will be sent. But, if she does not improve sufficiently before she has been in the country a year, she will have to be taken care of here as long as she may live.

The bill provides further that lists or manifests shall show whether a person emigrating to America has ever been insane, or confined in an institution for the insane, and that every immigrant on landing shall furnish to the inspector of immigration a certificate of a medical officer of experience in the treatment of mental diseases, showing whether the immigrant has ever been insane, or confined in an institution for the insane, or whether either of his parents has been so confined, the qualification of the physician giving the certificate to be attested by a consul or consular agent. These are the principal features of the bill. They appear to be reasonable with respect to a proper protection of this country from a class of immigrants whose coming is, on every account, undesirable.—*The Boston Herald*.

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#### Treatment of Whooping-Cough.

Dr. Thos. J. Mays believes that the pneumogastric nerve plays an important part in the production of this disease, as in other diseases of the thorax. The usual remedies having failed, he tried the application of counter-irritants over the course of these nerves in the neck, and obtained better results than by other methods. He directs to proceed as follows: Trace the pulsating carotid artery from behind the angle of the lower jaw to the clavicle on both sides of the neck. This will be a landmark for finding the pneumogastric nerves, which lie in close proximity and slightly behind the carotids. Gentle massage and kneading of this region of the neck, every hour or two, yield beneficial effects in many cases of this disease. The application of a strip of mustard plaster,



about two inches wide, from the angle of the lower jaw to the clavicles on each side of the neck, two or three times a day, until the full effects of the mustard are evident, is almost sure to cause amelioration of the spasmodic cough. Equal parts of gum camphor, chloral hydrate, and menthol, applied over this region, are also very useful. Painting the same area with tincture of iodine, twice a day, until irritation of the skin is produced, is a beneficial procedure. Finally, in very stubborn cases, the hypodermic injection of 3 to 6 minims of a 2½ per cent. silver nitrate solution over the vagi is resorted to. In order to render it painless 5 minims of a 2½ per cent. solution of cocain is first introduced through the needle. Under the influence of this line of medication the child becomes more comfortable, the paroxysms become less frequent, the severity of the cough diminishes, and altogether the affection assumes a different character, often in the space of a day or two.—*N. Y. Med. Jour.*

#### Medical Legislation Reform.

Dr. H. M. Shallenberg, of Rochester, evidently shares the general impression that there is room for improvement along the line of legislation affecting the practice of medicine. In the *Pennsylvania Medical Journal*, he says: A spirit of commercialism today in a majority of our medical colleges is paying a premium for a low standard of education, and reforms must come through means that will strike directly at the heart of this commercialism. Neither the study nor the practice of medicine is a commercial undertaking, and the conduct of the medical schools should be on a plane high enough to eliminate any suggestion of this commercial factor. In a few of the colleges high standards are required and maintained, but the proportion of these is to the whole number very small. Twenty-five years ago the country was filled with illiterate and incompetent practitioners, many of whom had never been within the walls of a medical school. The conditions were such as to require the enactment of protective laws, at first difficult of fulfillment, owing to the ignorance of the laity as to the existing conditions. While a battle for higher standards in efficiency has been waged steadily, resulting a few years ago in the organization of State Boards of Medical Examiners, yet our medical colleges, with few exceptions, have continued to admit and teach students from the same low standards and by the same old

methods. These same colleges, to satisfy the outcries of the profession for a more careful selection of students, have made a pretense in their annual announcements of preliminary educational requirements and the exaction of entrance examinations, while they have sought to enroll students by every means and have had as their only requirements the payment for the professor's ticket.

We have in the United States 156 medical colleges. In one city sixteen medical schools. About 6,000 young men are graduated each year. One-half of this number of graduates is in excess of the yearly need of one physician to 800 inhabitants, with allowance made for increase.—*Detroit Medical Journal.*

#### Home Nature Study Course.

By special appropriation, the State of New York maintains a Bureau of Nature Study and Farmers' Reading Courses in connection with the College of Agriculture of Cornell University. This Bureau publishes about nine lesson sheets a year, together with Teachers' Leaflets and Nature Study Quarterlies. These publications are sent free to teachers resident in New York. The work is well organized, favorably received and much good has been accomplished. There seems little likelihood that at present this work can be inaugurated in our state, but through the liberal management of the New York Bureau, teachers in Maine public schools can, by a small expenditure, become students in this course and receive the same benefit as the New York teachers.

The printer of the publications, W. F. Humphrey, Geneva, N. Y., will supply the monthly Quiz of the Home Nature-Study Course to students outside of the State of New York at a price sufficient to cover the cost of printing, mailing, etc. This offer is a year's subscription, nine numbers, for twenty-five cents, beginning with the April issue. They expect to increase the size of the lesson from six to eight pages, four pages to be kept by the student, the other four to be in the form of a Quiz.

The Bureau has published 22 Cornell Teachers' Leaflets and Nature-Study Quarterlies, which are constantly referred to in the Correspondence Course. Upon application, Mr. Humphrey will give the price list of these.

CHARLES D. WOODS,  
Director.

Orono, April 3, 1902.



### Kremo an Adulterant.

An honest creamery firm at Cambridge City has sent us a sample of material which the accompanying circulars name Kremo.

Kremo is a yellowish-white powder and is an adulterant for cream and milk. It comes from a rascally firm at Chicago, and its introduction among farmers and creameries is being pushed at this time in Indiana.

The circular advertising this adulterant says: "Kremo is dry cream. It gives a body to thin cream or milk, will permit of the reduction of cream with milk in such a way that it cannot be detected. Is just the thing for restaurant ice cream and wholesale trade. Is guaranteed harmless, also to pass all pure food laws everywhere. In cream or milk, used for ice cream, makes double the amount of ice cream that milk or cream will make that does not contain Kremo. Thin cream, by adding Kremo, may be made to appear like rich cream containing 40 per cent. of fat."

The directions for using Kremo for adulterating cream or milk are very elaborate, made necessarily so from the fact that "Kremo," which is simply powdered gelatine, must be carefully manipulated or lumps will form and disclose the adulteration. If the milk were added to cream without the gelatine (Kremo), the result would be a thin mixture which would not be accepted as good cream. The gelatine gives thickness, also imparts a rich yellow color, as some coloring matter is put into it. It is a fraud and swindle. Children fed on watered milk and gelatine will not get sufficient nourishment, and money is paid for water.

The last Legislature refused to allow a laboratory to the State Board of Health, and would not give an appropriation for enforcing the pure food law. Until this is done, adulteration will continue to run riot in Indiana and the people will continue to lose great sums annually in purchasing adulterated foods.—*Indiana State Board of Health.*

### Arsenization of Agricultural Food Products.

By PROF. JOHN URI LLOYD, PH. D., Cincinnati, Ohio.

So conspicuous has become the use of Paris green in certain directions, without, so far as I know, any attempt at legal restriction or even supervision, as to lead me to venture to enter a word of remonstrance.

So far as I know, it is not established that

arsenic-impregnated soil, where recurring crops of potatoes are raised, is innocuous to certain other forms of vegetation or to consumers thereof. Let us pass this phase of the subject, even passing also that of the use of Paris green on cabbage, which I believe is permitted without any restriction other than legal prosecution after a person is killed. At least I know of no attempt to prevent cabbage raisers from using Paris green in any amount they desire.

### TOBACCO.

Some years ago, while visiting Kentucky, a heavy tobacco dealer submitted to me the question as to whether the use of Paris green on tobacco was likely to be risky to life, stating that he had vainly endeavored to discourage its use. On investigation I found that instead of picking off the green worms—"worming tobacco" as of old, some of the raisers were sprinkling the growing tobacco with Paris green. This custom has probably now become universal, as is indicated by the tons of Paris green sold in tobacco-raising districts, and I am informed that in some instances so much of this arsenical poison is used as to actually color the leaves, and even to wash into ridges, where it accumulates in leaf crevices.

It is not my object to appear as an alarmist, nor yet can I be longer silent concerning what may be a possible source of danger to tobacco-users. In the absence of any authority on the subject, until investigations properly conducted demonstrate the *harmlessness* of Paris green on tobacco, I believe that tobacco-raisers should not be allowed to use it at all.

Among points of interest to be determined by proper authorities, it seems to me, are the following:

First—What is the effect on tobacco-smokers of arsenical fumes, such as could be present under these conditions?

Second—Could enough arsenic be present to act as a poison with persons addicted to chewing tobacco?

Third—Can the growing tobacco hold enough arsenic, without killing the leaf with which it is in contact, to injure consumers?

Fourth—What effect has the dust of such arsenical tobacco on persons who work in tobacco?

Until these, and possibly connected problems, are demonstrated to the satisfaction of competent authority, I maintain that no person should be allowed to use Paris green as an insecticide on tobacco.—*Eclectic Medical Gleaner.*

NASHVILLE, TENN., }  
April 24, 1902. }

Dr. Frank W. Searle, Editor,

Portland, Me.

*My Dear Sir:*—By virtue of the authority vested in me as President of The National College of Law, I hereby authorize you as editor to appoint from your state one worthy young man and one young woman annually to free law scholarship in this college. In the event there is no lady applicant, you are entitled to appoint two young men. These scholarships are worth \$100 a year, and entitle your appointees to regular instruction in law until graduation for the Bachelor of Laws degree and admission to the bar. Your appointees can enter any time within the next thirty days and find classes to suit their needs, as the summer law classes will be organized next month. If your appointees cannot enter for the summer law term, they can enter at the regular fall opening on Monday, September 1st, 1902.

The local newspapers of your state will gladly aid you in the way of notices, editorials, and otherwise helping you to select worthy appointees as a matter of general interest to their readers and the public at large. You may mention these two scholarships in the next issue of your JOURNAL and publish this letter in full.

The college is empowered by statute to grant all of its graduates the Tennessee Law License, admitting them to practice in the courts of this state. This law license admits them to the bar of other states on motion, without examination.

Board can be secured at \$10 per month and up, according to location and accommodations. Tuition is entirely free, the time, however, not to exceed three years.

As soon as you have decided upon your appointees, all that is necessary is that you notify this office to that effect, giving their names and addresses, and also a list of the unsuccessful applicants, who will be entitled to a scholarship, if any vacancy occurs.

Thanking you in advance, believe me, my dear sir,

Sincerely yours,

THE NATIONAL COLLEGE,

By WM. FARR, *President*.

foolishness, is quite likely to have as little part in an ordinary conversation of the present day as if he were a gluttonous anthropophagus, whose mental development only enables him to count up to the figure five. There are two classes in the community who are dumb in the present prevalence of shallowness and specious pretence, and these are the grossly ignorant and the really educated men.

Most of the talking seems to be done by those who have nothing to say and don't know how to say it.

It might well be questioned if it pays to be a real musician when about the only result of it is that about nine-tenths of the music one hears but serves to lacerate one's feelings and plunge the hearer in misery and despondency. The reason for this is, not that it is not an excellent thing to be an educated musician, but that if you are you but add to your torture, because most of the performers in ordinary so-called entertainments have not yet discovered what an awful thing it is to try to sing or play when they have nothing but self-conceit and assurance to fit them for the work.

In literature, too, the well-read man is likely to have little part in an ordinary conversation, because most of the talk is about the popular novels and the hysterical, erotic society drama. If he should happen to be so untactful as to acknowledge that he had not considered it worth while to read a certain very popular book (which, in reality, is not worth reading), then he is looked upon with the same pity and commiseration as if he were a hod carrier dressed in overalls and jumper.

Much of the conversation overheard in street cars pertains to science and medicine, but it is that fearfully exaggerated, appallingly perverted, and ill digested abstract known as newspaper science.

If a physician listens to the ordinary conversation going on about him (and he doesn't need to listen in order to hear it, for it is generally delivered in a high-pitched, screeching voice, and with that ex cathedra, dictatorial, I-am-Sir-Oracle style, which defies inattention,)—if a physician finds himself in such a fix he will be completely flummoxed and flabbergasted when he hears the dear ladies around openly disclosing the fearful and wonderful things which, they say, their doctors have told them about vaccination or the disease which happens to be fashionable just at that time. No doctor above the low level of a corn, wart and bunion professor would be guilty of saying the things, or say-

Dr. Risus Sardonius says that a man who has a cranial development much above that of a driveling idiot, or who has advanced in art, literature or science anything beyond the stage of educated imbecility and finesse

ing them in the way that the women and men all about us are every day declaring they have said.

The most remarkable thing about this whole matter is that people will persist in talking volubly about things which are evidently so far above their understanding and comprehension, but if folks only talked when they had something to say most of us would be dumb and the world would be oppressed with that appalling silence which is but a dull, aching, empty void.

All this portends that if you wish to be happy, contented and easy in your mind, you had best not aim at development in any direction above that of mediocrity.

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#### Lay Editors with Fads.

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That is a curious twist in the mental make-up of some lay editors which makes them abuse their official privilege and advocate some hobby wholly unrelated to the object for which their periodical was established. Thus the editor of the humorous paper, *Life*, feels himself justified in solemnly devoting a large part of his periodical to antivivisection, to believe in which requires as great a dearth of humor as of reason, and about which, of course, the editor knows nothing. The bad journalism is doubled by the bad ethics. Another example has been reported to us by Dr. John A. Koch, of Quincy, Ill. *The Review* is a Catholic periodical, published at St. Louis, whose editor goes out of his way to indulge in a rabid antivaccinationist crusade, even against Catholic archbishops who advocate vaccination. "Humbug," "crime," "fiendish inhumanity," etc., are the customary epithets applied to doctors. The editor of the periodical absurdly called *Vaccination*, but which is really devoted to extinguishing vaccination, is allowed to edit the department given over to the craze. To a remonstrant he replies that every scientist who has investigated the subject in the last fifty years has condemned vaccination; that nobody knows what it is; that all medical men confess it does not prevent small-pox, only mitigates it; that it causes many deaths and ills; that all who oppose it have made a careful study of it, and they are the greatest physicians of the age; and, finally, that the medical profession have never been unanimous in anything except when it was unanimously wrong. We hope this egregious trumpery will arouse sensible church officers and subscribers to put an end to such prostitution of journalism.—*American Medicine*.

THE PROFESSION'S DEBT TO HELMHOLTZ.—Among all the exhibits at the meeting of the American Medical Association in St. Paul there was probably none which more appealed to the gratitude of the profession than a little volume, modestly nestled among the various ophthalmological instruments of precision, and entitled "Beschreibung eines Augen-Spiegels zur Untersuchung der Netzhaut im lebenden Auge." For over fifty years we have been enabled to fathom and observe nature at work in her own laboratory; have been able to inspect the only nerve in the body which as yet is accessible to our view without the division of tissues; and have seen, by means of the application of simple optical principles, the interchange of venous and arterial circulation. Although the ophthalmoscope has been the subject of innumerable modifications since its invention, these all revolve around the fundamental principle applied by Helmholtz, namely, as is also quoted by Dr. Harry Friedenwald, of Baltimore, that the rays pass out of the eye in the same lines in which they have entered, and that they can be made to form a distinct image in an observer's eye. There was no pretense or superficiality about Helmholtz; he was a master, with a phenomenal depth and breadth of thought, who knew no intermediate point between knowledge and ignorance. His wonderful production constitutes a *coup de maître*.—*Philadelphia Medical Journal*.

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#### Cinnamon Water as an Antiseptic.

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Oil of cinnamon in aqueous solution acts like magic as a local disinfectant. In a recent wound of any kind, after stitching or whatever may be needed, keep a compress wet with cinnamon water constantly applied until healing is complete, which usually takes place without suppuration. It takes the place of corrosive sublimate and everything else. It is pleasant to use, cleanly, non-toxic, safe, and cheap. As a douche after parturition it is ideal, not often requiring to be used more than two or three times. I add three or four drops of the oil of cinnamon to two quarts of warm water, and direct it to be used as often as there is any scent to the lochia. In nasal catarrh it serves well, and in fact wherever a germicide and disinfectant is wanted.—*Medical World*.

"This seems a very healthy spot, my man," said the tourist to Giles. "I suppose people don't die here very often?" "No, sir. They only dies once!"

# Phillips' Emulsion

50% best NORWAY COD LIVER OIL  
minutely sub-divided,  
WITH WHEAT PHOSPHATES (Phillips')

Pancreatized, Palatable, Permanent, Miscible in Water, Milk, Wine, etc.

# Phillips' Milk of Magnesia

Mg H<sub>2</sub> O<sub>2</sub> (FLUID.)  
"THE PERFECT ANTACID."

for correcting Hyperacid conditions—local or systemic.  
Vehicle for Salicylates, Iodides, Balsams, etc.

# Phillips' Phospho-Muriate of Quinine, COMP.

TONIC AND RECONSTRUCTIVE.

WHEAT PHOSPHATES, WITH MURIATE OF QUININE AND STRYCHNINE.

PHILLIPS' WHEAT PHOSPHATES (ACID).

PHILLIPS' SYRUP OF WHEAT PHOSPHATES.

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# Mellin's Infants' Food

truly modifies the casein of the  
milk.

OUR BOOK, "THE HOME MODIFICATION OF FRESH COW'S MILK," WILL  
BE SENT FREE TO PHYSICIANS UPON REQUEST.

MELLIN'S FOOD COMPANY, BOSTON, MASSACHUSETTS.

## News and Abstracts.

At a recent meeting of the New England Association of Dental Examiners, held in Boston, D. W. Fellows, M. D., of Portland, was elected president.

Dr. L. K. Austin, of Clinton, has removed to Waterville, and will now limit his practice to diseases of the eye, ear, nose and throat.

### Another Substitutor Restrained.

The M. J. Breitenbach Co., American agents for Gude's Pepto-Mangan have just received a decision against a certain firm in Massachusetts, restraining them from using packages, wrappers, etc., which closely imitate those familiar to users of Gude's preparation.

It is of the utmost importance that this evil of substitution should be abated, not only in regard to the dispensing retail druggist, but also to the manufacturer who attempts to enrich himself by goods not sold on their merits, but merely because, in external appearance, he has stolen the livery of some successful preparation. The reputation of Pepto-Mangan (Gude) is founded on real merit, and the business has been built up by ethical methods, therefore we rejoice that another substitutor has been detected and restrained.

### Prize Essay on the Dangers from Self-Drugging with Proprietary Medicines.

The Colorado State Medical Society offers a prize of twenty-five dollars for the best essay, for circulation among the laity, upon the dangers of self-drugging with proprietary medicines.

The competition is open to all. Essays must be typewritten in the English language, must contain not more than 3,000 words, and must be submitted before June 15, 1902. Each essay must be designated by a motto, and accompanied by a sealed envelope bearing the same motto, and enclosing the name and address of the author. The essay receiving the prize will become the property of the society for publication. Others will be returned to their authors. Essays should be sent to the Literature Committee.

DR. C. A. GRAHAM, *Sec'y.*  
Stedman Block, Denver, Colorado.

### Mississippi Valley Medical Association.

The Chairman of the Committee of Arrangements for the twenty-eighth annual

meeting of the Mississippi Valley Medical Association, Dr. A. H. Cordier, has announced the dates of the next meeting in Kansas City, Mo., as October 15, 16, 17, 1902.

The President, Dr. S. P. Collings, of Hot Springs, Ark., has announced the orators for the meeting, Dr. C. B. Parker, of Cleveland, O., to deliver the address in Surgery and Dr. Hugh T. Patrick, of Chicago, the address in Medicine, selections which will meet with the approval of every physician in the Mississippi valley.

A cordial invitation is extended every physician in the United States, but especially of the valley to attend this meeting and take part in its proceedings. Titles of papers should be sent the Secretary, Dr. Henry Enos Tuley, 111 W. Kentucky St., Louisville, Ky., at as early a date as possible, to obtain a favorable place on the program.

### Reception at the Medico-Chirurgical College Laboratories, Philadelphia, Pa.

The informal opening of the new laboratory building of the Medico-Chirurgical College, Seventeenth and Cherry streets, took place at 1 o'clock on Thursday, May 1st. The reception was given to the students of the three departments, medicine, dentistry and pharmacy. Short addresses were delivered by Hon. Edward M. Paxson, Professor Edward J. Houston, Professor L. Webster Fox, chairman of the building committee, and the deans of the various departments. The new building has 100 feet front on Cherry street and 78 feet on Seventeenth street, and is five stories high. On the fifth floor is the anatomy and histology laboratory; on the third, chemistry; second, dental dispensary; first, general medicine and surgical dispensaries. The basement will be furnished as a gymnasium, college club and reading rooms. The chemical laboratory is said to be one of the finest in the United States. The building has cost, so far, over \$125,000, and considerable more will be expended on it before it is opened for the students in the fall. Arrangements have been made to give instruction to 700 students in the three departments.

### The American Orthopedic Association.

The sixteenth annual meeting of this society will be held in Philadelphia, June 5, 6, 7, 1902. A program of great interest and value has been prepared.

THE BEST RESULTS ARE ASSURED IN BROMIDE  
TREATMENT WHEN YOU SPECIFY

# PEACOCK'S BROMIDES

AND THE GENUINE IS DISPENSED.



NEUROLOGISTS and General Practitioners prefer it because of its superior qualities over the commercial salts. . . Each fluid drachm represents fifteen grains of the combined chemically pure Bromides of Potassium, Sodium, Ammonium, Calcium and Lithium.

DOSE: ONE TO THREE TEASPOONFULS, ACCORDING TO THE AMOUNT OF BROMIDES REQUIRED.

# CHIONIA

From CHIONANTHUS VIRGINICA.

**R**E-ESTABLISHING portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.

Hepatic  
Stimulation.

Without  
Catharsis.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES A DAY.

FOR CLINICAL TRIAL WE WILL SEND FULL SIZE BOTTLE TO ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

PEACOCK CHEMICAL CO.  
ST. LOUIS, MO., U. S. A.

In CARDIAC and GENERAL MUSCULAR RELAXATION,  
due to Functional Cardiac and Circulatory Disturbances,

# CACTINA PILLETS

Has many Advantages over other Heart Stimulants.

IT HAS NO CUMULATIVE ACTION, AND  
IS ABSOLUTELY SAFE AND RELIABLE.

EACH PILLET REPRESENTS ONE ONE-HUNDREDTH OF A GRAIN CACTINA, THE ACTIVE PROXIMATE PRINCIPLE OF CEREUS GRANDIFLORA

DOSE: ONE TO FOUR PILLETS THREE TIMES A DAY.

SAMPLES MAILED TO PHYSICIANS ONLY.

The CHIEF Characteristics of the Physiological Action of

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Is to promote Normal Digestion by encouraging the flow of Digestive Fluids.  
It is the Modern and Most Successful Treatment for  
**INDIGESTION.**

A PALATABLE PREPARATION OF PANAX SCHINSENG  
IN AN AROMATIC ESSENCE.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES  
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A FULL SIZE BOTTLE, FOR TRIAL, TO PHYSICIANS WHO WILL PAY EXPRESS CHARGES.

SULTAN DRUG CO., St. Louis, Mo., U. S. A.

### The Cleveland Medical Journal.

*The Cleveland Medical Gazette* and *The Cleveland Journal of Medicine* have joined forces and will publish a new journal under the title *The Cleveland Medical Journal*. The numbers already issued show that the aims are high and that the standard maintained will be excellent, and these qualities must insure success.

We have received from the George R. Fuller Co., of Rochester, N. Y., a copy of their recent catalogue entitled "The Making of a Man." This really artistic booklet is a work of art, being finely printed and beautifully illustrated. This well-known firm has been engaged in the business of making artificial limbs for over forty years, and during that time have taken out many patents for various mechanical devices connected with the perfecting of artificial limbs. Skill and honesty are the foundations upon which they have built up a large and successful business.

The catalogue contains much valuable information besides that intimately connected with the price list, and will well repay a careful reading by every physician and surgeon.

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### American Academy of Medicine.

The twenty-seventh annual meeting of the American Academy of Medicine will convene at the Kensington, Saratoga, June 7th, at 11.00 A. M., and continue during Monday, June 9, 1902.

A series of interesting and valuable papers is promised, covering a variety of subjects and not confined so closely to a symposium as has been the custom for the past few years. A feature of the meeting will be an address, by invitation of the committee, by Edward T. Devine, of the United Charities of New York, on "Co-operation of the Medical Profession in Charitable and Social Reform." It is expected to have a full discussion of this important subject immediately following the address.

The president's address will be given on Saturday evening, and the social session on Monday evening. The price of the tickets for the latter, including supper, is two dollars each.

The completed program will not be ready until about the middle of May, when it will be sent to those who will advise the Secretary of the Academy of their wishes to receive copies.

CHARLES MCINTIRE, *Sec'y.*

I am not in the habit of writing promiscuously of the virtues of medicines, but when I have used a remedy for many years, with uniform success, I feel that it is not out of place to give that remedy my commendation. I have been engaged in the practice of medicine here for many years, and the diseases which I am called upon to treat are mostly of malarial origin. Under such circumstances I am required to have a positive and efficient tonic for the hepatic organs. It is very difficult for me to get along without that tried and true remedy for the above conditions, Chionia. I frequently use it alone, and at other times in combination with other indicated remedies. I find it a real tonic for liver troubles and not a mere stimulant, that its administration promotes digestion and supplies the exhausted and run down liver with new energy. Another great advantage is that it has no depressing effects, which ordinary purgatives possess.

L. WILLIAMS, M. D.

Yorktown, Ark.

### Diet in Bright's Disease.

Dr. William Hale White says: "Much has been written about the diet in chronic Bright's disease, and frequently the importance of it has been much exaggerated. The dietary for Bright's disease has even been fastidiously determined by the color of the meat ordered. If any method at all underlies many of the dietetic directions given to patients with Bright's disease, it is that those who order the diets try, by means of dieting, to diminish the risk of uremia. But we have no certain knowledge what is the poison which leads to uremia, and therefore we can hardly hope to influence it by diet; and, indeed, there is no series of cases published, showing that any particular diet is more likely than others to lead to uremia. The great guiding principle in dieting patients suffering from chronic Bright's disease, is that, as we do not know what is the cause of uremia, the best way to avoid it is to give such diet as will keep the patient in the best general health."—*Med. Record.*

The latest domestic broil, in which the husband is accused of howling like a dog whenever his wife sang "The Holy City," is well calculated to awaken a sympathetic throb in the bosoms of those who are compelled to listen to the same old songs, year in and year out. Howling like a dog is, perhaps, a more polite form of protest than the more ordinary alternative of being driven to drink.—*The Boston Herald.*



**A Product of the  
Highest Nutritive Value**

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**ARMOUR'S**  
**Extract of**  
**Red Bone Marrow**

---

This preparation is rich in the elements that are necessary to the economy. Its administration increases the percentage of hemoglobin, causes the red corpuscles to multiply, enhances the oxygen carrying power of the blood and stimulates the appetite.

Physicians with cases of Anemia, Marasmus and other obstinate diseases, should try the Extract of Red Bone Marrow and note results.

One to four teaspoonfuls in cold plain or carbonated water, beer or with Nux Vomica, dilute Phosphoric Acid and Fowler's Solution.

**Armour & Company**  
**CHICAGO**

### Success and Gratitude.

We beg to gratefully announce to the medical profession the removal of our offices and laboratories to 105 Chambers St., New York, N. Y., where, with greater space and more extensive facilities, we shall be better enabled to take care of the increasing demand for Ergoapiol (Smith) and Glyco-Heroin (Smith).

After having our personal statements as to the unusual efficacy of these preparations in their respective indications verified by hospital and clinical investigations, we sought to interest the physician individually, and the satisfaction of those who have investigated either or both could not be more fully manifested than in the necessity of our new and more commodious quarters.

Indeed, none the less is our gratitude to the JOURNAL OF MEDICINE AND SCIENCE, which has been so frequently mentioned in the communications requesting trial samples etc., therein showing the large and wide-spread circulation of so consummate and estimable a JOURNAL.

Very sincerely,  
MARTIN H. SMITH Co.

ACNE AND X-RAYS.—Ulmann, in the *Wiener Klinische Wochenschrift*, reports a case of severe acne of the back in a patient aged sixteen, treated by the X-rays. Fifty exposures of half an hour were given. After fifteen sittings the acne spots swelled, and there was profuse erythema of the skin. Afterwards the acne spots shrunk, while the skin over them exfoliated.

### GEESE.

Ev-er-y child who has the use  
Of his senses knows a goose.  
Sees them un-der-neath the tree  
Gath-er round the goose-girl's knee,  
While she reads them by the hour  
From the works of Scho-pen-hau-er.  
How pa-tient-ly the geese at-tend!  
But do they re-al-ly com-pre-hend  
What Scho-pen-hau-er's driving at?  
Oh, not at all; but what of that?  
Nei-ther do I; nei-ther does she;  
And, for that matter, nor does he.

I am particularly well acquainted with Cactina in the pellet form and can speak highly of it as a cardiac tonic and as a remedy for palpitation in dyspepsia.

ALEXANDER BRYCE, M. D., D. P. H.  
Birmingham, Eng.

HOSPITAL SERVICE OBLIGATORY. — A year's service in a hospital has been obligatory to the medical graduate in Budapest; four months are to be given to the medical wards, two to the surgical and two to the

gynecological; the remaining four months are to be passed in any department selected by the interne.—*Exchange*.

INCONVENIENCE OF KNOWLEDGE.—First medical student: "What's worrying you?"

Second medical student: "You know I am desperately in love with Miss Beautie."

"Yes, and I have noticed lately that she has a sad, dreamy, soulful expression."

"That's it. I don't know whether it's love or her liver."—*New York Weekly*.

COCAINE POISONING.—Amy Imitrite and chloroform inhalations, with opium and chloral hydrate for the convulsions. Make use of artificial respiration, and injection of camphor dissolved in ether.—*Ez*.

### An Upbuilder in Post-Grippal Cases.

Very many of our readers know, by reputation, at least, Dr. A. H. Ohmann-Dumesnil, one of the foremost physicians of St. Louis. From a letter of recent date we are permitted to quote the following, which we do with pleasure: "I needed a roborant, and took, with much benefit to myself, Hagee's Cordial of Cod Liver Oil Compound. Since then I have had occasion to use it in a number of cases of grippe, and in all of them the results were of the best. The action of this preparation is rapid and thorough, and in a remarkably short time a case is recovered. It is certainly the remedy par excellence for this now prevalent affection. In a number of post-grippal cases, in which enteric neuralgia, bronchial involvement, and a number of nervous symptoms manifested themselves, I have found this preparation equally effective. It is an excellent upbuilder, and rapidly restores to its former condition the weight which has been diminished by the waste of tissues consequent to grippe."

This is certainly very high praise and from an eminent authority.—*Mass. Medical Journal*.

IN GERMANY, TOO.—According to recent Berlin police reports, nowhere in the world have quacks and their nostrums more support than in Germany. While the city population of Germany has increased 58 per cent. and the regular medical men 76 per cent., the quacks have increased 1,537 per cent. Of 123 men who were found to practice medicine in Berlin without a license, 30 had been domestics, 45 artisans, and 16 clerks. Only 24 had even a fair education. The women quacks were more numerous than men quacks. Of 130 found practicing without a license, only one was even fairly well

# WE CAN'T SHOW YOU HERE

what it is able to do, but we can tell you here what every member of the medical profession that has prescribed it testifies that it has done.

"Colden's Liquid Beef Tonic in conditions of extreme prostration and debility nourishes the system with a natural food, invigorates the organism by its vital, tonic influence upon the nervous system, and stimulates the dormant bodily functions to normal activity."

To facilitate prescribing and to obviate the possibility of error, Doctor, kindly observe the following memorandum:

Ext. Carnis Fl. Comp. (Colden);—Formula of preparation No. 1—Beef, Iron, Cinchona, and Brandy; Formula of preparation No. 2—Beef, Cinchona, and Brandy.

**THE CHARLES N. CRITTENTON CO.,**  
Sole Agents for the United States.

Laboratory: 115 and 117 Fulton St., New York.

Samples sent free on application, to physicians.

THE ALKALINITY OF BLOOD SERUM

## GLYCO-THYMOLINE

(KRESS)



Birmingham Nasal Douche.

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MEDICAL BULLETIN, Phila., Pa., March, 1899.

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educated. Sixty had been servant girls, 24 dressmakers, 10 charwomen, and 5 nurses. The three men who made the largest incomes had been clerks; of the three most prosperous women two had been washer-women and one a milliner. Thirty per cent. of the men and 15 per cent. of the women had been in jail.—*Medical News*.

**Sanmetto in Gonorrhea, Cystitis, Prostatitis, Irritable Bladder, Incontinence of Urine, and in Sexual Neurasthenia and Pre-Senility.**

I have prescribed Sanmetto for the past six years, and find it quite agreeable to the patients, being very pleasant to take and of great utility in the treatment of a large number of cases frequently met with in general practice. It has given me uniformly good results in all stages of gonorrhea, cystitis, prostatitis, irritable bladder and incontinence of urine. I have also found it of great value in sexual neurasthenia, and much more satisfactory as an aphrodisiac than any drug that I have employed during my twenty-six years of practice. WM. PARSONS, M. D.

Chicago, Ill.

**SHARP TALK.**—"I think I owe you a call," said Mrs Nopay.

"Really?" replied the doctor's wife, cuttingly. "Only this morning my husband was remarking that your husband owes him half a dozen visits."—*Philadelphia Press*.

**Ecthol.**

Ecthol is an American preparation made from a mixture of the fluid extract of *Thuja* and *Echinacea angustifolia*. The latter is a plant belonging to the natural order Compositæ, which grows in North America. The fresh root of this plant is in high favor with the Indians as an antidote against the bites of serpents. Dr. Stinson found that this plant promotes the flow of saliva, is a mild and inoffensive antiseptic, and, above all, an aphrodisiac. It is employed in malaria, in typhoid, and in diseases of the stomach, as well as locally in the form of an aqueous solution of the fluid extract as an aphrodisiac. In addition, it may be given internally in the form of a fluid extract or a tincture. Ecthol is said to be the most powerful antagonist of suppuration. According to Meyer this substance has a powerful effect in toxemias. Parker, Webster, Snyder and Russell have shown that it is of great service in infectious diseases, in septic wounds, and in the bites of serpents, as well as in chronic catarrhs.—*N. Y. Medical Journal*, March 15, 1902.

Camphor smoking is reported as the latest fad among Parisian neurotics. The habit is begun under the belief that it produces a beautiful complexion, but it soon becomes a passion, producing somnolence, apathy, and weakness.—*Am. Med.*

**The Rational Treatment of Prolapsus Uteri.**

"This condition, so generally prevalent in women, and only afforded temporary relief by the use of pessary, can be more rationally and satisfactorily treated by relieving the burden thrown upon the round ligament which supports the uterus, by depleting this engorged and congested member of its abnormal supply. We suggest the following procedure.

*First*, the uterus and entire uterine canal should be thoroughly cleaned by flushing with hot water.

*Second*, the use of an astringent antiseptic should next be employed, which will contract the uterine capillaries and blood vessels.

*Third*, the ligaments and surrounding tissues must be toned up to enable them to more rapidly regain their normal tonicity. As a remedy particularly adaptable in the above condition, Dr. M. A. Wheeler, attending physician of the Rensselaer Co. Hospital, Troy, N. Y., highly recommends Micajah's Medicated Uterine Wafers, and says that, after many years of practice, he places his sole reliance upon them. These wafers combine the aseptic and astringent action so imperatively required and also tone up the relaxed condition of the uterus and its adnexa. Leucorrhea, so often prevalent in these cases, will rapidly disappear under this treatment."

**JUST THE PLACE TO LIVE IN.**—"Gracious? You don't mean to say you are going to move out to Bogville?"

"Indeed, I am. I consider it an ideal place."

"Huh! You ought to read the papers. There's more sickness there than in any town in this vicinity."

"I know it. I'm a physician."—*Stray Stories*.

**GLOBUS HYSTERICUS, CAUSES OF.**—In the contraction of the œsophagus, that is sometimes seen in hysterical women, there is sometimes a source of local irritation which appears to favor the occurrence of this condition. Ears plugged with wax, large tonsils and adenoids, nasal growths, may all be responsible and should be looked for. The mental effect of slight surgical procedures, when really indicated, is a great advantage.—*International Journal of Surgery*.

# THIS JOURNAL

would have to be many times its present size to print even brief abstracts of the number of cases of Nervous Exhaustion, Malnutrition, Anæmia, General Debility, permanently cured by

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**DR. BUMPS** (phrenologist): "This boy, ma'am, will never die in state's prison." Mrs. Gimlet: "I'm sure we ought to be thankful for that." Dr. Bumps: "Yes, the bump of longevity is highly developed; he will live to serve out his time."

**THE SALT PACK IN RHEUMATIC GOUT.**—Dr. Jonathan Hutchinson says, in the February *Polyclinic*, that he knows of no remedy so effectual in getting rid of irritability and synovial infusion, in connection with rheumatic gout, as the salt pack. This consists of flannel, soaked in a saturated brine of common salt, which is wrapped around the affected joint, covered with oiled silk and a bandage, and kept on the whole night. It should be applied every night until the cure is effected.—*Med. Rec.*

We have in the country a goodly number of rich men who are on the lookout to seize chances to do a service with their wealth for the country. Such a man is Mr. J. H. Smith, who has just bought "The Holy Family," by Rubens, and given it to the Metropolitan Museum.

In the *British Medical Journal*, No. 1997, p. 880, Thomas W. M. Blake, M. D., St. Andrews M. R. C. S., England, says: "Many patients with consumption or other wasting diseases appear to tolerate its [Angier's Petroleum Emulsion] use when cod liver oil cannot be tolerated. Instead of setting the stomach in revolt, as the latter will often do, it appears to soothe the mucous membrane and produce a more natural tone and power of assimilation. Petroleum does not irritate the nerves supplying the mucous membrane of the stomach, but doubtless cleanses away the foul mucous and leaves the digestive organs in a more healthy condition to perform their functions naturally. Nutrition is improved, therefore the condition of the weakened and diseased lungs improves."

**THE THREE FATES.**—"Practically the world over, three constant and terrible diseases cause the destruction of countless human lives. These three diseases are leprosy, tuberculosis and syphilis."—*Clinical Review.*

Dr. Milner Fothergill wrote: "The combination (Fellows' Hypophosphites) is an excellent one—the best yet made to my knowledge. It is a happy thought.

"It is a good all-around tonic, specially indicated when there is nervous exhaustion. It is readily digestible, and has given much satisfaction in my experience of it."

### Effects of Atropia on the Bowels.

By I. L. VAN ZANDT, M. D., of Fort Worth, Texas.

The frequent allusions to the use of atropia in "obstruction of the bowels," prompts me to report my observations. The idea early found lodgment in my mind that belladonna gave power to the nonstriated muscular fiber of the bowel, and hence would be available as an aid to cathartics and laxatives, also beneficial in atonic or parietic conditions, leading to the accumulation of flatus or feces. I have never resorted to the large doses I see recommended, but have depended on moderate doses, repeated at such intervals as not to interfere materially with the comfort of the patient, viz., 1-6 to 1-4 gr. ext. belladonna or 1-150 to 1-120 gr. atropia sul., three or more times daily. I will mention a few cases illustrating my use of the remedy:

The first case which I can definitely recollect was my wife, who was attacked with malarial fever, two days after her third confinement, August 26, 1871. Her bowels became enormously distended, and very tender. One-fourth grain extract of belladonna was given, and in an hour or two a dose of salts. When the bowels moved there was a complete collapse of the abdominal walls, and such a discharge of flatus as I have never known before or since.

Within a few years of this time, R. H. consulted me about a fecal tumor. Purgatives had no effect on it. The fluid contents of the bowels passing around. I gave 1-4 gr. extract belladonna three times daily. In a few days the scybalous masses composing the tumor separated and passed off.

In 1879 I was called upon to see J. S., a Baptist preacher, suffering with dysentery. I gave him an occasional dose of castor oil

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**SPECIAL NOTE.**—Fellows’ Hypophosphites is *Never sold in Bulk*, and is advertised only to the Medical Profession. Physicians are cautioned against worthless substitutes.

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**LITERATURE OF VALUE UPON APPLICATION.**



with opiates during the intervals, observing that every dose of oil brought away some scybalous masses. I gave 1-4 grain belladonna three times daily, as I intended to continue slight peristalsis to prevent the formation of scybala, not thinking that those passed were only a small draft on a large deposit. I was therefore surprised at my next visit to be told that after two or three doses he had at two actions passed about a "chamberful" of masses from the size of a pea to that of a walnut.

April, 1900, I was called to see Mrs. T., from whom both ovaries and tubes had been removed two or three days before. The surgeon was sick, and I was asked to attend her. Her bowels had not moved, though several doses of Rochelle salts had been given. The abdomen was very much distended and tender. I gave hypodermically 1-30 grain strychnia sulfate and 1-120 grain atropia sulfate. In about three hours she was relieved by a copious discharge of flatus and fluid feces. We resorted to the atropia again in two or three days, with a like favorable result.

In pelvic inflammations when an opiate is necessary, I have habitually given belladonna or of late atropia with it to prevent tympanites as well as to add to the anodyn effect.

These cases will serve to show something of the use I have been making of belladonna or its alkaloid for 30 years. I have not expected to relieve hernia, volvulus, intussusception or other mechanic "obstruction," but when I considered the obstruction due to atony I used the agent with the greatest confidence, which is still unabated.—*American Medicine*.

#### Thyroid Feeding in Ununited Fracture.

Potherat (*Bulletin Med.*, 1899, 1088) has found that thyroid feeding is of distinct value in cases of ununited fracture. His first case was a man, aged fifty, who had suffered a fracture of the leg above the ankle. No union had taken place after thirty days, during which time he wore a plaster cast. Mas-

sage was then tried for some time, but without improvement. He was then put upon 0.5 grams thyreoidin daily, and in ten days marked improvement was noticed, which resulted in very rapid union. His second case, an alcoholic, sustained a fracture of the rib, which, after ordinary forms of treatment, remained ununited at the end of thirty-five days, but which promptly solidified after ten days of thyroid therapy. Folet (*Bulletin Med.*, 1899, 185) reports a similar case of non-union of forty-five days' standing, which promptly united after two weeks of thyroid feeding. The experience of Steinlin (*Arch. f. Klin. Chirurg.*, lx) is interesting in this connection. He found that dogs who had been subjected to thyroectomy showed by controls that the bones united much more slowly than in the dogs that still possessed the thyroid gland.—*Bulletin of Cleveland General Hospital*.

#### Scarlet Fever and Cow's Milk.

Hall (*Med. Rec.*, 1899, No. 20), in a paper on scarlet fever, calls attention to the interesting fact that scarlet fever does not occur epidemically in countries in which cow's milk is not a staple article of food. Such countries are Japan and China. In India, where cow's milk is used and scarlet fever is extremely rare, he believes the custom of nursing the child until it is three or four years old is probably the reason for its non-occurrence in epidemic form. The frequency with which epidemics of fever have been traced to a certain milk supply, causes this article to furnish considerable food for thought. Hall refers to an epidemic of scarlet fever which occurred in London and was traced to a dairy in which the cows were found to be suffering from a vesicular disease of the udders. Pus was secured from these vesicles and injected into healthy calves, who developed similar vesicles, manifested an elevation of temperature, developed a diarrhea, and also a running at the nose. He also mentions a similar epidemic of like character at Wimbledon, which was also traced to a certain dairy.—*Bulletin of Cleveland General Hospital*.

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# Journal of Medicine and Science.

ISSUED ON THE TENTH OF EACH MONTH.

In the Interests of Public Health, and in order that the People of Maine may reap the great Benefits, both hygienic and economic, assured by a judicious Application of the Principles of Preventive Medicine, this Journal supports the following Propositions and urges Physicians and Laymen to work diligently to further their Consummation.

- 1st. The Establishment of a Sanatorium for the Treatment of the Consumptive Poor.
- 2nd. The Abolishment of the Coroner System and the Appointment of Medical Examiners.
- 3rd. The daily Inspection of School Children by School Physicians.
- 4th. The more liberal Endowment of our Medical Schools by private Charity, and the voting of larger Appropriations to our State and Local Boards of Health.
- 5th. The Establishment of a State Bacteriologic Laboratory.

For, surely, health is the prime essential to success in life, and the health of the people is the foundation upon which all their happiness and all their power depends.

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Vol. VIII.

PORTLAND, MAINE, JUNE, 1902.

No. 7.

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## Original Articles.

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### In Local History—Extracts from an Old Medical Journal.

By FRANKLIN STAPLES, M. D., of Winona, Minn.

**R**EADERS of the JOURNAL may be interested in a brief notice of the contents of an early medical journal published in Portland. I have at hand, in good state of preservation, a copy of a medical journal, the title of which reads as follows: *The Maine Medical and Surgical Reporter*.—Conducted by W. R. Richardson, M. D., and R. W. Cummings, M. D., Proprietors.—June, 1858. Published Monthly:—\$3.00 a year, In Advance—Portland—Sanborn & Carter; 1858. This number is marked Vol. I, No. 1. In this notice of the old journal, we are looking backward, in the history of medicine and of the medical profession of Portland and of the state, nearly half a century; to the time when most of our local medical institutions which now have their important places, and when the works of some of our profession whose lives and labors now have a worthy place in history, were at their beginning.

The first article in the old journal is by Henry T. Cummings, M. D., on glycerine. It must have been in the early days of glycerine in practical pharmacy. The

writer says of it: "This body, known, until within a few years, only as a curiosity in chemistry, has recently acquired an importance in the long list of remedial agents which renders it worthy of extended notice." Harry Cummings, as he was familiarly known, was a brother of the journal editor, Dr. R. W. Cummings. The pharmacist, Harry Cummings, was one of the early teachers in the Portland School for Medical Instruction. The students were accustomed to go to the Cummings drug store for practical instruction in pharmacy.

The next article of the journal shows the following title, name of author, and date:—*Case of Suppurative Arthritis—Recovery.* By William Warren Greene, M. D.—Gray, Me., May 1st., 1858.

The case of acute arthritis reported was one of the knee joint, caused by injury. The treatment was, first, general eliminative and sedative, with continuous cold application locally; and later, evacuation by free incision, cleansing, passive motion and general support. The author says: "There are three points in the treatment to which I would call particular attention. The free incision into the cavity of the joint, the saturation of the system with iodide of potassium, and the passive motion."

This was at a time when Dr. Greene was practicing at Gray; before he came to Portland, and before the time of his great work

as a teacher of clinical surgery at the Maine Medical School, the University of Michigan, the Long Island College Hospital, Brooklyn, N. Y., and elsewhere. The name of Professor William Warren Greene will ever hold its high place in the history of the American profession.

Another contributor to this number of the *Reporter* was Dr. John Buzzell, whose communication is dated, "Cape Elizabeth, April 3d, 1858." Dr. Buzzell is well remembered.

The leading editorial has for its subject, "On the Identity of Intermittent, Remittent, Yellow, Typhoid and Typhus Fevers." The writer favors the idea of identity in cause and general conditions in all these fevers, so-called, and concludes his argument in the following words: "If what we have stated of the circumstances under which intermittent, remittent, yellow, typhoid, gastro-enteric, typhus, and continued fevers arise, and of their course and symptoms, is true, then the inference is natural that they have all the same exciting cause, and that the differences they present, arise from differences in the circumstances under which they appear." He further observes: "During the course of these fevers certain pathological lesions occur, but no particular lesion occurs with sufficient uniformity to make it stand either in the relation of cause or effect to the febrile perturbation." The method of determining the cause and nature of disease by observing the apparent symptoms and surroundings only, is fully illustrated in this well-written paper of the editor. This was at a time before certain developments in natural science, especially those in bacteriology, had come to the aid of positive diagnosis, rendering it more a matter of demonstration than of supposition. We can now, more than formerly, speak of what is than of what appears to be.

One or two further quotations may not be without interest especially to the local profession at this time. Of the Portland School for Medical Instruction an editorial says: "It is not generally known that Portland offers facilities for the acquisition of medical education as great as almost any place in the country." It further says, "If it has not the hospital and clinical advantages to be found in New York or Philadelphia, it has others that more than compensate the student for their loss." The Portland Dispensary was then in existence, the Portland School about two years old, a building for a City Hospital had been constructed but not then occupied, and the Marine Hospital was about to be. The fine

clinical advantages of the present time, however, were then in the future. A State Arsenal occupied the present site of the Maine General Hospital: the Maine Eye and Ear Infirmary had not been thought of; and the project of moving the Maine Medical School to Portland for the sake of clinical advantages, was in time to come, and was to succeed after the years. The note on the Portland School reads as follows: "The Board of Directors is composed of Drs. Wood, Gilman, Davies, Thomas, Robinson and Dana. The teaching faculty is composed as follows:—William C. Robinson, M. D., on Surgery and Obstetrics; Israel T. Dana, M. D., on Theory and Practice of Medicine and Materia Medica; A. M. Paddock, M. D., on Anatomy and Surgery; H. T. Cummings, M. D., on Practical Pharmacy." The history of the school since that time speaks for the institution, and tells the story of its success better than written words can do.

Of the then new Marine Hospital:—"The beautiful and commodious building recently constructed by the United States government near the city for a marine hospital is, we are pleased to learn, about to be occupied under the supervision of Dr. Samuel Tewksbury." Dr. Tewksbury's qualifications for the office are not unnoticed.

This much of and from the first number of the first medical journal published at Portland, Maine, and probably the first in the state.

#### NEW YORK ACADEMY OF MEDICINE.

##### Section on Orthopædic Surgery.

Meeting of Jan. 17, 1902.

GEORGE R. ELLIOTT, M. D., *Chairman*.

Dr. W. R. Townsend presented a baby four months old, showing a mild type of webbed fingers. The webbed hand was smaller. The fore and middle fingers of one hand showed the web; no other congenital deformities present.

No explanation was offered to account for the extreme smallness of the webbed hand.

#### HEMI-HYPERTROPHY OF THE BONES OF THE FACE AND HEAD.

Dr. Townsend also presented the case of a girl four years old. The right side of the face and head seemed larger. When first seen oedematous tissue over the back of the head rendered it difficult to determine whether the bones were enlarged or not.

The oedema subsequently decreased and an increased size of the occipital and right parietal bones was manifest. The frontal bone was not involved, but the right inferior maxillary bone appeared enlarged. There was no history of syphilis; lower extremities were developed. The child had an enlarged abdomen and the deformity known as chicken-breast. The exact diagnosis was puzzling; the question was whether it was leontiasis or rachitis.

#### THE ASPIRATION TREATMENT OF ABSCESSES.

A patient was also presented by Dr. Townsend—a boy eight years old who, January 9, 1901, gave the history of hip disease of one year's duration. There was an abscess on the outer aspect of the thigh which was aspirated April 6th; it refilled and was again aspirated on April 29th, and again on May 11th. The abscess did not recur. The case was presented to illustrate the successful treatment of these abscesses by aspiration.

He said abscesses not interfering with application of braces and not burrowing and those not in a condition of mixed infection could be safely let alone or aspirated.

Dr. Nathan stated that after careful study of the literature of reported cases of leontiasis ossea, it did not appear that there was any agreement between authorities reporting the cases as to the definite lesions constituting this condition. All the reported cases differed from one another and the case presented differed in many respects from all cases noted in the literature of the subject. He said that originally in the case presented there was a distinct cleft in the occipital bone. There was certainly some enlargement of the occipital bone as determined by measurement, but the hypertrophy of the soft parts over the lower maxilla made it difficult to measure that bone.

Dr. V. P. Gibney, in discussing the case of abscess treated by aspiration, presented statistics from his private records of 23 cases treated by aspiration, 15 of which were cured. Of these 15, in three cases the aspiration was done once; in four cases, twice; in four cases, three times; in four cases, four or more times. Of the remaining eight, three were aspirated once, but the needle was large and caused leakage and sinus formation; four were aspirated twice; in one spontaneous opening took place a few days later. In all cases where cure failed there was no damage done by the aspiration.

Dr. T. Halsted Myers expressed himself as in favor of non-operative treatment when

the tubercular abscesses were not infected, and were not interfering with the patient's health or threatening another joint. He had seen many cases cured without operative interference and considered this best in dispensary practice; aspiration should be tried before more radical operative measures.

Dr. R. H. Sayre said that he had aspirated frequently and sometimes secured good results, sometimes not. He had seen many cases get well without treatment and cited one case of recurrent abscess of the thigh; if these abscesses could not be opened and kept surgically clean he advised aspiration, and if this were not practical to let them alone.

Dr. George R. Elliott asked Dr. Gibney if his statistics included any spinal abscesses.

Dr. Gibney replied that they referred to abscesses connected with the hip only. He further stated that he had had cases of spontaneous disappearance, but that most of the psoas abscesses had been of long duration that had been given up under the expectant plan of treatment.

#### TORTICOLLIS.

Dr. Royal Whitman presented the case of a boy twelve years of age, illustrating treatment of severe torticollis by the open incision with over-correction of the deformity. The operation was performed November 7, 1901, and resulted in correction of the deformity with no limitation of motion.

Dr. J. P. Fiske asked Dr. Whitman what structures were cut.

Dr. Whitman replied that all resistant structures were divided—the two insertions of the sterno-cleido-mastoid muscle and the cervical fascia being the most important.

Dr. Myers said the operation should be done early. He had seen cases left until the individual was fifteen years old, in which the sternal ends of the clavicles had been partially dislocated upward by the short sterno-cleido-mastoid; this was a difficult deformity to correct.

#### CONGENITAL ANTERIOR DISPLACEMENT OF THE HIP.

Dr. Whitman presented a girl five years old illustrating congenital anterior displacement of the hip. He said ordinary methods of displacement were not successful in such cases, and whatever treatment was adopted it must be supplemented by osteotomy of the femur, otherwise the head of the bone would be displaced when the parallelism of the limbs was restored.

Dr. Fiske said he thought the condition should be regarded as a superior displacement rather than anterior.

Dr. Whitman replied that he understood the term congenital anterior displacement of the hip as indicating that the head of the femur was directed forward, lying below and to the outer side of the anterior superior spine.

#### CONGENITAL DISLOCATION OF THE HIP CURED BY THE LORENZ METHOD.

Dr. Whitman also presented a child aged three years. The non-cutting operation had been performed one year previously. The plaster bandage was worn only seven months. This illustrated the fact that in certain cases of a favorable type cure might be accomplished in a short time—cure meaning both as to function and position. It was impossible to say from observation which hip had been originally displaced.

#### DOUBLE CONGENITAL HIP DISLOCATION TREATED BY THE OPEN METHOD.

Dr. Whitman presented a patient, a girl seven years of age, upon whom he had operated by the open method three years previously. The patient now walks with but slight swaying of the body; the lordosis has completely disappeared, and the permanency of the cure is assured by the lapse of time; there is practically no restriction of normal motion.

Dr. Elliott asked if the two operations were performed at the same time and if much acetabular scooping had been done.

Dr. Whitman replied that the operations were performed about three weeks apart; the heads of the bones in this case were easily replaced and very little scooping was necessary; he considered one advantage of the scooping was that it caused adhesions which bound the bones more firmly and prevented subsequent displacement; the amount of scooping differed in different cases, some requiring a great deal, while in others simple arthrotomy might be sufficient. He further stated that after operation of this character, the fixation bandage should be employed for many months, exercise and passive motion being useless until complete repair had taken place. In one instance he had fixed the limb for eight months and at the end of that time the motion was far less restricted than in the majority of cases in which the restraint had been removed soon after the operation.

#### PHOCOMELIA.

Dr. Henry Ling Taylor presented the case of a girl five and a half years old, the

second of four children; no developmental anomalies in the family.

The mother stated that the feet presented, and that something was wrong with the shoulder at birth, which was rectified by the physician. When the child began to walk, at fourteen months, a slight lameness on the left side was noticed, which has persisted. Motion at the hip was normal, but the left leg was two inches shorter than the right, the shortening confined to the femur; the trochanters were in normal position and the classical signs of congenital dislocation and coxa vara were absent. He offered the diagnosis of congenital shortening of the left femur, confirmed by a skiagraph which showed the femur to be short and small.

The points of interest were the differential diagnosis, the slight lameness with considerable shortening, which was the rule when the joint motion and muscular power were good, and the absence of true lateral curvature with a markedly sloping pelvis, which was also the rule.

Dr. Elliott asked Dr. Taylor for the etymology of the word phocomelia.

Dr. Taylor replied that it was derived from two Greek words meaning seal and limb, the combination being equivalent to flipper deformity. The term had reference to imperfect development in length of one or more of the long bones of the extremities.

Dr. Sayre considered that the term phocomelia should be restricted to the extreme cases in which the long bones were either absent or almost entirely so.

Dr. Taylor stated that Kummel, Klausner and other authorities applied the term to such cases as the one presented.

#### WEBBED FINGERS (OPERATION).

Dr. Alfred Taylor presented a case of webbed fingers. The case was operated on recently, but some of the fingers were in a condition to show the results of the operation. The patient, a boy, was born with three fingers of each hand entirely webbed to the tips. On the middle and ring fingers of both hands the bases of the terminal phalanges had grown together, the little finger showed no bony union. The first operation was done in November on the little finger of the left hand. Later the entire condition of the right hand was relieved by operation. The method was to make an incision on the dorsum of one finger and palmar surface of the other, dissect up the flaps, using the opposite flaps to cover the fingers. In the little finger primary union was obtained. Instead of

making a crosscut at the base of the flap, or instead of making a V-shaped flap, the incision was simply carried to the full distance up toward the web in each case, then it was found by saturating the edges together that the edge of one flap would obliquely cross the edge of the other crossing in opposite directions, the two edges meeting in the middle. This method worked very well.

#### PAPER.

Dr. Sayre read a paper entitled, "The Operative Treatment of Webbed Fingers With Presentation of Cases."

Dr. Sayre reviewed briefly the classical methods of operation and illustrated on a model his method of operation, by making a flap for one finger and grafting to cover the other and taking an A shaped flap from the dorsum of the hand, slipping it over and stitching it to the palm to form the bottom of the web. In methods which did not employ a graft from some other part of the body to cover the inner side of one finger, the effort was made to cover a defect with insufficient material, since the web connecting two contiguous fingers was much less extensive than the amount of skin which would cover the contiguous margins of those fingers normally and pass into the interdigital cleft. For demonstration a stuffed glove of one color was slipped inside one of a different color, the fingers of the latter being sewed together to represent webbing after the removal of the piece of kid lying on the contiguous sides of the webbed fingers.

Dr. Myers considered grafting a great improvement over other methods in these cases. Only the bottom of the cleft need be covered by a flap.

Dr. V. P. Gibney stated that he had always used the Didot method of operation, but thought Dr. Sayre's plan an excellent one.

Dr. Sayre presented a patient upon whom he had operated for webbed fingers. The fingers were webbed to the tips and the phalanges united by bony union. The case illustrated the method of making a flap for one finger and using skin graft for the other.

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#### Post-Partum Hemorrhage and the Way to Control It.

By C. F. J. KENNEDY, B. L., M. A., M. D., Obstetrician to St. Luke's Home, Springfield, Mass.

The Ergot Aseptic of Parke, Davis & Co. is a great favorite of mine, and I would not feel safe in attending a case of labor unless

my bag contained a few bottles of this preparation. During the past eleven years I have attended many obstetric cases, and the probability of a post-partum hemorrhage has always tended to make me feel uncomfortable. Although not entirely gone, my fear has considerably decreased since I commenced using Ergot Aseptic. In several severe cases where ordinary preparations of ergot failed to act, a hypodermic injection of Ergot Aseptic quickly produced the desired result, which was permanent and was followed by no secondary relaxation. I can recall no case in which an abscess followed its use. One of my patients, who was practically bleeding to death, and to whom I administered Ergot Aseptic, has the empty bottle hung up in the place of honor, and shows it with pride as the bottle that contained the medicine which saved her life. And to my mind she is perfectly right.

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#### Therapeutic Suggestions.

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In the treatment of lumbago, Sir James Grant has obtained excellent results from the old surgical procedure of acupuncture. Ten to fourteen small needles (No. 8) are inserted one-half to three-fourths of an inch into the affected muscles and left in situ for one or two minutes.

Under this treatment the tense, hard muscles relax, pain disappears and does not return on motion.

After the needles are withdrawn, the skin is sponged and friction is applied with a rough towel.

Douglas, in a recent article, stated that apomorphine is an excellent hypnotic in insomnia and that it does not fail even in the wildest delirium.

The dose is small, about gr. 1-30 and is given hypodermically. It is necessary to select doses sufficiently large to produce sleep without exciting nausea, and a dose corresponding to one-third an entire dose has been found to be sufficient. Sleep comes on in about half an hour and continues for an hour or two, and a small dose of some other mild soporific will then extend the sleep. There is no danger of acquiring a habit, for larger doses promptly produce vomiting.

In treatment of the morphine habit, large doses of bromides have received the endorsement of many physicians. Large doses are necessary, 120 grains every two hours, so that about one ounce is taken the first day. The

second day a smaller amount is given in the same way, and this may be sufficient, or a third day's dosage may be necessary.

The bromides should be given only during the daytime and when the drowsiness is so profound that the sleeper cannot be awakened, or, when awakened, is incoherent, the drug should be discontinued.

On recovering from the bromide sleep, the craving for morphine will have disappeared.

The poisonous effects of the bromide fall upon the respiratory and cardiac centers, so that a weak heart or impaired pulmonary functions serve as contraindications.

While cocodylate of sodium has received the endorsement of many physicians as a helpful remedy in the treatment of tuberculosis, yet several cases of arsenical poisoning have been reported from its indiscriminate use.

Dr. H. C. Jordan says that three or four per cent. of formic aldehyde in glycerine applied to tonsils with a brush is a specific in tonsillitis.

Mr. Malcolm Morris and Mr. Ernest Dare, after a long experience, state that the treatment of lupus by means of concentrated light rays (Finsen's method) is second to none in utility and importance.

Other investigators claim that the treatment is expensive, long and tedious, and that cures are not permanent.

The treatment of lupus and epithelioma by X-rays seems to promise much better results.

Pellegrini's experience with nitroglycerin in epilepsy seems to indicate that it is much more successful remedy than the bromides. In almost every case the number and the severity of the attacks were reduced, and no bad results followed. A one per cent. alcoholic solution was used, and of this 2 to 10 minims were given in water night and morning.

Prof. Richet, of Paris, insists on his phthisical patients eating from one to two pounds of raw meat every day and reports excellent results.

Murrell finds that in cases of amenorrhea, associated with anemia, some form of iron should be given, and then senecio is an excellent remedy. He gives it as a pill of two grains, t. i. d.

Much testimony is now on record of the value of suprarenal solutions in hemorrhage and congestion, and that it is an efficient astringent, hemostatic and heart tonic.

Tausig declares that in sub-acute and chronic diarrhoeas tannigen is a valuable remedy.

Recent literature seems to indicate that trional as well as sulphonal may give rise to serious harm if used in too large doses for too long a time. In several such cases neuritis has followed its use.

Dr. Henry Harper considers urea the only drug of any value in tuberculosis. He gives it hypodermically, commencing with 40 grains dissolved in 4 drachms of water, and gradually increases the strength to 65 grains.

Even hopelessly bad cases showed sudden and steady improvement under this plan of treatment.

Dr. J. P. Cammidge, after a long trial of urotropin, declares that it is a valuable remedy in every condition of the urinary apparatus in which the urine is acid when it leaves the kidney, and that it is especially efficient in typhoid cystitis, in cystitis accompanied with enlarged prostate, and in suppurative pyelitis and cystitis. The doses should be 15 to 20 grains, t. i. d. Larger doses may give rise to formication followed by a rash. Its antiseptic action is believed to be due to the formaldehyde which is set free.

Barling contends that iodide of potassium is a remedy of real value in actinomycosis, but that it must be given in large doses, 40 grains, t. i. d.

Most dermatologists seem to agree that acne is caused by a specific bacillus, but sulphur and soap still continue favorite remedies.

Speaking on the diagnosis of cancer of the breast, Dr. Bell, of Montreal, says that every mass or growth in the breast of a woman over 25 years of age which cannot be clearly diagnosed as a cyst, an abscess, a fibroadenoma, or of inflammatory origin, should be looked upon as a possible, and even probable, cancer, and every effort should be made to arrive at a positive diagnosis, including an exploratory operation, if necessary.

Warbosse recommends the intravenous injection of saline solution in severe delirium tremens, and reports a case in which about 40 ounces were injected into the median cephalic vein. The patient was in extremis and the injection was followed by great improvement in the symptoms, and later, rapid and complete recovery. The solution acts by strengthening the heart and by diluting and eliminating the toxic products.



Chirata is the latest remedy for drunkenness, although it has been in use in India for many years. It creates a disgust for alcoholics, which is but temporary, lasting for a few days only, so that when the craving returns the drug must be again taken. Chirata is given as an infusion (half an ounce of the drug to a pint of boiling water), and the dose of this is one to two ounces, t. i. d.

In facial paralysis (neuritis of the facial nerve) the remedies of value are iodide of potassium, strychnine and galvanic electricity.

Dr. Hainsberger is authority for the statement that bicarbonate of potassium, given early, will abort a cold, and that it is "a remedy of unusual value" in the treatment of la grippe.

Whitehead is authority for the statement that for 25 years he has never failed to cure a case of migraine, no matter how severe, by the introduction of an ordinary tape seton through the skin on the back of the neck.

The present trend in surgery is to attempt to realize asepsis by insisting that the hands shall not come in contact at all with the field of operation, and to make this possible both König and Binnie recommend the use of long instruments to aid in the avoidance of manual contact.

All investigators agree that it is impossible, with all our resources, to bring the hands into anything like a sterile condition, and rubber gloves and varnishes have not proved satisfactory, because they cause sweating of the hands, and if they then become punctured they add to the danger.

Lilienthal, after quite an extended experience, is a zealous advocate of closing incised wounds by means of sterilized zinc oxide plaster instead of sutures. The deeper structures are closed, if necessary, by subcutaneous sutures, and then the skin is brought into perfect apposition by means of strips of plaster. He contends that this method saves time and the pain of removing sutures, and that it prevents the infection of wounds by the skin staphylococcus.

Other operators advocate placing the plaster strip parallel with the incisions and passing the sutures through the plaster instead of through the skin.

Drs. Türek and Murphy, of Chicago, are warm advocates of using an adhesive rubber-dam over the field of operation, to protect the wound from skin-germ infection.

Ether is first applied to the skin and then

the rubber is carefully and closely applied to the field of operation, and the incision is made through it as though it were one of the layers of the skin. The dam remains in place until the sutures have been introduced and is then removed. The dam adheres so closely to the skin that it is not affected by the discharges or the solutions used in operating.

Murphy also finds the dam useful when applied to the skin adjacent to discharging sinuses or wounds, as it then prevents irritation of the skin.

Vladimiroff reports excellent results in the treatment of suppurating wounds with compresses wet in 2 per cent. solution of sodium bicarbonate.

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#### Clinical Experience with Adrenalin.

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Mayer, in the *Philadelphia Medical Journal* of April 27, 1901, reaches the following conclusions as a result of experience with the active principle of the suprarenal gland in these cases:

1. Adrenalin solutions supply every indication in rhinological practice for which the aqueous solutions of the extract have been hitherto applied.
2. They can be used in sterile form.
3. They remain unchanged for a long time.
4. A solution of 1 to 1000 is very strong and is all-sufficient for operative cases, and 1 to 5000 or 1 to 10,000 for every purpose of local medication.
5. They may be safely applied to persons of every age and of either sex.

The author's experience having been so highly satisfactory with adrenalin, makes him feel justified in saying that in the isolation of the blood-pressure-raising principle of the suprarenal glands we are confronting an epoch-making discovery. The discovery of the active principles of other animal substances will be sure to follow in the near future, and organotherapy will not only derive a new impetus, but exactitude in the administration of these remedies will be sure to follow.

We will no longer be compelled to use an animal extract of potency today and an utterly inert one at another occasion, but would always have the same remedy of known strength and power. Percentages of solutions would be exact in every instance, and in appropriate methods could safely be employed with absolutely sterile solutions.—*The Therapeutic Gazette.*

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PORTLAND, MAINE, JUNE, 1902.

## Editorial.

### A Gain and a Loss.

Though the standards of medical education have been raised in continuous progression during the past ten years, and though this advance has been of great benefit to the general public as well as to the profession itself, yet there are some minor defects in the system which call for remedy, and they need only to be noted to be antagonized.

The standard of preliminary education has been so advanced that the medical student entering the medical school must be as well educated as the students in the other professional schools. The length of the course and the curriculum have been so extended that the local medical schools now compare favorably with the continental schools, and the methods of teaching have been so bettered that the pedagogics of medicine are achieving practical and scientific results fully equal to those accomplished in other departments of education.

A few years ago medical instruction consisted largely of didactic lectures, often delivered by professors of no particular aptitude for the work, and utterly incapable of inspiring any interest or enthusiasm in the students. Lectures became "one demnition grind," and the system had little to recommend it except

that it was a time and labor saving method for the teachers.

At the present time all this parody on teaching has disappeared, and now clinical instruction has a prominent place in the curriculum. Indeed, so great advances have been made in medical pedagogics in the United States that the "trip to Europe" has little to recommend it, except that it serves as a means of playing to the galleries, appealing to the groundlings, and endeavoring to "catch the gawks," and is most assiduously cultivated by those who have need of these things. What is true of a musical education is largely true of a medical education, and that is that both can be acquired in this country as easily and as fully as in any country under the sun.

In the older days the medical student went with his preceptor on his rounds and assisted in the office, so that all forms of disease became familiar to him.

At the present day, with all our improvements in educational methods, there is still a demand for just this sort of instruction.

Nine-tenths of the practice is made up of comparatively slight ailments, and such cases never get into our hospitals. The clinical instruction given in most medical schools consists of the study of chronic diseases and of rare and unusual cases. This is excellent so far as it goes, but it is of much greater importance for the young physician to be able

to diagnose the exanthemata, or to treat a cold, headache or "biliousness" than it is to do an anastomosis of the intestines or to detect an incipient case of acromegaly.

Many a young graduate has seen his first case in obstetrics only after he has hung out his sign, and all the old grannies in the neighborhood can give him points and cover him with sarcasm when he confronts his first case of measles or scarlet fever.

A headache, an attack of cholera morbus, or even a painful corn is a very serious affair to the patient, even though there be little danger in the disease, and the young physician who has seen and studied such slight ailments under a preceptor is adding to his equipment as a successful practitioner. Neither is there any reason why every medical student may not acquire clinical instruction that shall cover the whole field of diseases, for during vacation he can get bedside instruction in the phases of so-called common diseases.

In short, even the present system of medical instruction has a defect, and therefore the regular college course needs to be augmented by a course of training under a general practitioner on his daily rounds. This defect seems to be that, excellent as is the clinical instruction afforded, it has to do mostly with major surgery and with rare chronic diseases rather than with the more common, simpler ailments which make up a large part of the physician's practice.

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#### The Utilization of Schoolhouses.

There is much effort directed at the present time to a larger and more economic utilization of our schoolhouses. In every city and town are many such buildings, which have cost much money, and which are only in use during eight hours of the day for a part of the year.

Why should not these buildings be employed for the instruction of children of a larger growth during the hours when they are not in use by schoolchildren? The night schools have occupied some of these buildings, for the instruction of those deprived of early advantages, and the civic clubs of our cities have done a good work in opening the playgrounds during vacation to the children of the tenement-house districts.

All this is commendable, but much more can easily be done. Twelve years ago Dr. Henry M. Leipziger, of New York, conceived the idea that there were thousands of people in that city who could be uplifted by means of free lectures, delivered evenings in the public schoolhouses. Starting from small be-

ginnings in one district of New York, this influence has spread, until last year more than 3,000 lectures were given in 100 different schoolhouses. These lectures were attended by over 900,000 persons, chiefly adults "eager to take advantage of such means of instruction."

The lectures cover a wide range and include both instructive and recreatory features. During the winter of 1901, noted teachers, scientists, physicians, musicians, and artists gave lectures upon the elementary principles of science, the results of discovery and inventions, history, biography, art, music, travel, political economy, literature, and other subjects.

At first, the city government granted only a very small appropriation for this purpose, but, as the movement spread and the good results attained became more apparent, the funds furnished became more and more liberal, until at the present time some of the new schoolhouses are equipped with lecture halls of large seating capacity.

While our schoolhouses are now serving a most important purpose—the training and education of the young—yet it is apparent that in Portland, and in many other cities, we are not getting all the good possible out of these expensive public buildings.

At a recent meeting of the Kotzschmar Club it was urged that the children of our public schools should have larger opportunities to hear good music, and that the schoolhouses could be utilized for the purpose of concerts given by local singers and instrumentalists. This is good, but the scheme could be easily enlarged, so that it would cover at least a large part of the educational course now in such successful operation in other states.

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#### The Vacation Season.

Every summer more and more people are coming to Maine to enjoy a longer or shorter period of recreation and rest. Maine's climate is cool and invigorating, and every town situated on the coast offers greater or less advantages as a summer resort. Not alone this, but many of the inland towns, like Bridgton and Fryeburg, afford the advantages of higher altitudes.

The lake region affords recreation and enjoyment to those who delight in fishing, sailing and boating, and the wilds of Maine are known to hunters and sportsmen the world over.

While the state boasts some of the finest summer hotels in the country, fitted with

every luxury and convenience, and constructed with every attention to sanitation and hygiene, yet the prices are not exorbitant. Besides this are many smaller hotels and boarding-houses, at which the cost of living is so reasonable that families find it as cheap to summer in Maine as it would be to remain at home.

The Maine Central Railroad has recently issued a very attractive and convenient booklet, giving the fullest information in regard to the hotels, boarding-houses, and camps of the state, with rates for board by the day or week. One of the most surprising things about the pamphlet is the low rates which are offered to the summer tourist.

After a reading, everybody must be convinced that no man is so rich that he can afford to stay away from Maine this summer, or so poor that he need to.

The "Old Home Week" Association have decided that the state and its several cities and towns will extend a cordial welcome to all former residents, and to visitors during the week of August 2-9. During at least one day of this week, every town in the state will "expect company," and will pride themselves on making all who come home happy. In some of the cities a more elaborate program will be carried out, and everything will be done to make this year's celebration one of added pleasure and profit to all.

#### The Retirement of Surgeon General Sternberg.

After a long and very creditable service in the army, winning his way through the various grades by real merit to the high office of Surgeon General, Dr. Sternberg is to be retired with the rank of Major General.

During his connection with the medical corps of the army, Dr. Sternberg has assumed great responsibilities, and has done much to elevate and improve the status of the service. He was largely instrumental in establishing the Army Medical School, and has ever been active and courageous for the advancement and perfecting of his department.

His contributions to medical research have been varied and valuable, including, as they do, additions to our knowledge of bacteriology, of aseptic methods and of the pathology of malaria and yellow fever.

By his personal efforts and by his pen, he has been the means of awakening interest in the scientific problems of medicine, and has been a stimulator of all those engaged in the field of original research and investigation, and his work in behalf of Public Health has been continuous and helpful.

In recognition of Dr. Sternberg's ability and of his services in behalf of the profession and of the public, the physicians of the principal medical centres of the country will tender him a complimentary banquet in New York on June 13.

Dr. Sternberg has earned his way to high preferment, and his work has assured him enduring honor.

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### Reviews.

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**QUAIN'S DICTIONARY OF MEDICINE.** By various writers. Third edition, largely rewritten, and revised throughout, with 14 colored plates and numerous other illustrations. Edited by H. Montague Murray, M. D., F. R. C. P., assisted by John Harold, M. B., B. Ch., B. A. O., and W. Cecil Bosanquet, M. A., M. D., M. R. C. P. Published, 1902, by D. Appleton & Co., New York. Price, half morocco, \$10.00.

Many physicians will extend a hearty welcome to a new edition of this well-known book of reference. Much of the book has been rewritten, several additions and eliminations have been made, and the subject matter carefully revised so as to epitomize the advances recently made.

The dictionary as now presented well fulfils its purpose of giving a short, clear and concise account of the essential principles of the etiology, diagnosis, pathology and treatment of almost every disease, and it is a book which will appeal especially to the student and the busy doctor.

Two hundred and eighty physicians have contributed to the work, and the articles have been so judiciously edited as to bring them as much into harmony as possible. The book is judiciously illustrated, and is well printed and well bound.

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**A PRACTICAL TREATISE ON SMALLPOX.** Illustrated by Colored Photographs from Life. By George Henry Fox, A. M., M. D., Consulting Dermatologist to the Health Department of New York City, with the Collaboration of S. D. Hubbard, M. D., S. Pollitzer, M. D., and J. H. Huddleston, M. D. In two parts. Published, 1902, by the J. B. Lippincott Company, Philadelphia and London. Price, \$3.00.

This treatise on smallpox is both valuable and timely. The illustrations, colored photographs taken from life, are especially life-like and give an excellent idea of the different forms and stages of the disease. The book, therefore, comes very near to the value of clinical lectures on this prevalent disease, and will be of great assistance to both students and practitioners in helping them to be able to make an early diagnosis.

The author, a well-known dermatologist of

many years' experience, has brought signal ability and great enthusiasm to the work, and, aided by trained assistants and large clinical opportunities, he has produced a treatise which surely will meet a need of the present time. The book is in two parts, and, considering the character of the work, the price is reasonable.

AMERICAN EDITION OF NOTHNAGEL'S ENCYCLOPEDIA. Diphtheria, Measles, Scarlet Fever, and German Measles. Diphtheria. By Wm. P. Northrup, M. D., of New York. Measles, Scarlet Fever, and German Measles. By Professor Dr. Th. von Jurgensen, Professor of Medicine in the University of Tübingen. Edited, with additions, by William P. Northrup, M. D., Professor of Pediatrics in the University and Bellevue Medical College, New York. Handsome octavo, 672 pages, illustrated, including 24 full-page plates, 3 of them in colors. Philadelphia and London: W. B. Saunders & Co., 1902. Cloth, \$5.00 net; half morocco, \$6.00 net.

This volume, the third in the series of English translations of the "Nothnagel System of Practical Medicine," needs no recommendation. Professor Jurgensen and Dr. Northrup are too well known for us to expect anything but the best. The article on Diphtheria, entirely original with the editor, is fully in keeping with the high standard set by the other German articles which comprise the work. Dr. Northrup, having been associated with Dr. O'Dwyer at every step in the perfection of intubation tubes, is particularly fitted to describe this aspect of the treatment of diphtheria.

Professor Jurgensen's monograph on Measles unquestionably is the most comprehensive contribution on that infection that has appeared, bringing out so fully the valuable Danish records of the Faroe Islands epidemic. His exposition of Scarlatina is unrivaled, both for richness of clinical detail and exactness and clearness of statement. "Fourth Disease" and German Measles have been accorded spaces consistent with their importance. The editor has shown judicious decision in his extensive additions, making the work far and away the best and most up-to-date treatise of the subjects extant. The book is profusely illustrated, containing, besides a large number of text cuts, twenty-four full-page plates, three of which are in colors.

DISEASES OF THE NOSE, PHARYNX, AND EAR. By Henry Gradle, M. D., Professor of Ophthalmology and Otology, Northwestern University Medical School, Chicago. Handsome octavo of 547 pages, profusely illustrated, including two full-page plates in colors. Philadelphia and London: W. B. Saunders & Co., 1902. Cloth, \$3.50 net.

This volume is intended to present diseases of the Nose, Pharynx, and Ear as the author

has seen them during an experience of nearly twenty-five years. In it are answered in detail those questions regarding the course and outcome of diseases which cause the less experienced observer the most anxiety in an individual case, questions to which an answer is not easily obtained from text-books. In the therapeutic part of the work, the author has given detail only to those procedures which have withstood the test of critical experience. Topographic anatomy being a requisite for all surgical work, the author has wisely devoted liberal space to this branch of the subject. The numerous illustrations are exceptionally accurate in their portrayal of the pathologic conditions, especially so the two full-page colored plates. In comparison with works of the same size and scope, this book holds a high place as a text-book and book of reference. The author seems to have well carried out his avowed purpose of writing a text-book which should present to the student all the facts bearing on the subject, and to present them in as logical a development as possible. The publishers have done their part in excellent taste, and the book is a credit to the skill and accuracy of book-making.

THE FREETHINKERS MANUAL. Containing the description of the seat and the nature of the human and animal soul; an explanation of thought, dream, death and life, the illumination of the brain, the fecundation, the storage batteries in the human and animal body, an explanation of fever, disease, etc. By Prof. Dr. Baur, Physiologist, and H. F. Herbert, Electrician, and a great number of scientists. Published, 1902, by the Radical Publishing Co., of Philadelphia.

So far as the essays in this book upon religious subjects are concerned, the weakness in them consists in the fact that the writer seems to always underrate the strength of his opponents, and his arguments, when they can be dignified by such a name, are at most jejune and puerile. Calling Christians "religious fakes" is not a very convincing sort of argument, and to set up "men of straw" just for the satisfaction of "bowling them over" is not a very ennobling form of controversy.

In their discussion of religious subjects, the authors pursue largely the worn-out subterfuge of declaring that Christians believe such and such things—beliefs which, so far as we know, very few of any sect at the present time claim to believe—and then they seem to exult in the fact that they are able to disprove the things which nobody believes anyway. To most religious men and women of the present day the principles animating the Christian life are few, simple,

and easily understood, and they care very little about most of the so-called beliefs which the authors of this book use as a premise to found their arguments upon.

So far as we can find, the authors are much more adept at tearing down than building up, and even if they have demolished the Christian religions, they seem to be unable to give us any better form of religion to take its place. Every person is entitled to his own opinion, but there is no reason why others should accept and believe without convincing proof. The chapter devoted to an elucidation of The Primitive Force is so unconvincing that we must say that we prefer to stick to the Almighty rather than to substitute electricity for Him. The arrogance and assurance of the authors in setting up their own pet theories is amazing, and we wonder how they arrived at the blissful condition of considering everybody else but themselves ignoramuses. Their method seems to have been to first set up a theory and then to give new functions to organs and parts in order to support it. Of course, if one has a theory antagonistic to the opinions of everybody—scientists, theologians, and philosophers—the most conclusive way of proving it is to call all the other fellows ignoramuses and then at once proceed to state your own theory. The authors of these essays seem to have made some wonderful discoveries, as well as utilized the old worn-out arguments of Ingersoll. They have discovered the "missing link" in Venezuela, though they don't seem to know what to do with him after they get him, except to draw some evolutionary inferences, which, according to authorities on evolution, have nothing whatever to do with the evolutionary theory. They have discovered that the primitive force of the universe is electricity, and last and most important, they have discovered that everybody who doesn't happen to agree with them must be a fool. This is very edifying, but in all this we are reminded of the sage advice of Mr. Josh Billings, to the effect that a man had better know a few things and be sure of them, than to know so many things that ain't so.

Furthermore, most physicians will be surprised to know that the number of special senses is now eight instead of five or six, and to learn what he uses his stethoscope for in listening to the heart; and at the processes by which the "primitive" electric force is generated in the human body, and at the function given to the choroid plexus and the ventricles of the brain; but of course this is

all right, because the authors are sure they are right and everybody else who has studied the nervous system is wrong. Still it would, perhaps, have been more satisfactory if they had somewhere stated the experiments upon which they rely to prove their remarkable assertions.

We find it hard to believe that there is a physician in the world who believes what these writers say we believe about the cause of fatigue, or the theory of combustion and body heat, or the function of the muscular system, or many other things that they say we believe. We are also foolish enough to think that the neuron theory is a much better explanation of thought, sleep and dreams than the theory of the freethinkers. It is also to be deplored that, since electricity is such an important factor in all the manifold processes going on in the human body (according to these freethinkers), and since they transform every organ of the body or some part of it into generators, accumulators or transmitters of electricity, that they, in their wisdom, do not go one step farther and tell us just what electricity, this primitive force, really is. The explanation of the cause of sex is about as lucid as other theories which have been promulgated and is founded on the remarkable fact (?) that the temperature of boys is higher than that of girls. In the chapter on The Origin of Man, more "men of straw" are set up and knocked down; evolutionists are said to believe things which no evolutionist does believe; and the woolly ape of Venezuela, is again dragged in to prove the descent of man. If there is an evolutionist of any note who believes that man ascended or descended from an ape, or that a missing link is necessary to the proof of the evolutionary theory, his name has not been given to the world, so far as we know.

The chapter on The New Medicine is delightfully simple and refreshing. In essence it amounts to this: There are three kinds of maladies, "1st the subelectrical diseases; 2d the superelectrical diseases; 3d the mixed maladies." The first class includes "those in which the electric current is too weak; the second, in which the current is too strong; and the third, in which the current is too weak during the first part of the sickness and too strong during its latter part." Cancer and leprosy is consigned to the first class and physicians will be glad to be informed of their causation, though we don't see how they or anybody else will be any better off for this knowledge.

There are many good things well said in

this book, but the general animus is perhaps well expressed by the closing quotation "Human stupidity alone is immortal," and if, after reading, we are convinced by the theorizing, we must at the same time conclude that the times are woefully out of joint. The book is especially well printed, paper, type and binding being alike good.

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PRACTICAL DIETETICS, WITH SPECIAL REFERENCE TO DIET IN DISEASE. By W. Gilman Thompson, M. D. Second edition, enlarged and thoroughly revised. Published, 1902, by D. Appleton & Co., New York. Price, cloth, \$5.00.

This book treats of a subject of which the medical student hears very little during his course, and the number of authors who have written about it in a scientific way is small. There is no more important subject in therapeutics than this one of dietetics and one so little understood. For this reason, and because of its inherent merits, this book is timely and helpful.

This, the second edition, has been largely rewritten, carefully revised, and judiciously augmented, so that it now presents an exhaustive treatise of the subject of dietetics. The author has introduced the essential parts of the work of the United States Department of Agriculture in the fields of food adulteration and of the value of special dietetics and rations.

The sections on Diet in Disease have been enlarged and developed, with special reference to their practical application for treatment of the sick.

This book would be a valuable addition to every physician's library and its large sale is proof of its appreciation and worth. The volume is well printed, type, paper, illustrations and binding alike excellent.

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### Correspondence.

BOSTON, MASS., May 5, 1902.

To the Editor of the *Journal of Medicine and Science*, Portland, Me.:

DEAR SIR:—In your issue of April, under the heading, "Legal Status of the Eddyite and the Osteopathist," you published an article containing a statement which I would like to review. You say, "Beyond all question the osteopath and Eddyite are aiming to practice medicine." This probably is true of the osteopath, since his system is not offered as anything more nor less than a method of curing sickness, and who, by the way, are certainly accomplishing some good results in the way of adjusting the human system.

Christian Science heals the sick as a secondary work. Relief from physical illness follows the spiritual regeneration of the patient. The prime purpose of this science is to improve the spiritual condition of those who apply to it, and this is generally followed by an improved physical condition. This science is simply a religion which heals. Christian Scientists make no pretensions toward the practice of medicine and the practice of this science is not a business, but a ministry.

I desire to enter a kindly protest against the use of the words "Eddyite" and "Eddyism." These terms are not correctly used from a lexicographical standpoint, since this faith is not an ism but a science which has been convincingly demonstrated by its adherents who have thereby made it their very own. To speak of it as an ism of Mrs. Eddy's would be incorrect, especially at this late day. The term is exceedingly discourteous to the founder of the Christian Science movement, and very undesirable to the vast army of intelligent people who constitute the Christian Science church. The use of these terms, then, is epithetical, or what school children would denominate calling names. We have noted that these terms, which are used in your quotation from the *American Medicine*, are never used in the more mild and courteous criticisms on this subject but by those who manifest more or less animosity.

ALFRED FARLOW.

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### Selections.

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#### The Study of Cancer.

The interests of science and humanity demand additional light on the subject of cancer. The magnitude of the concerted effort that is being made by civilized society to produce this light can be fully appreciated only by one who attempts to follow conscientiously contemporaneous writings pertaining to the etiology, pathology and treatment of this dread disease. The need is urgent, and it is characteristic of the era that individual research should be supplemented and to a certain extent replaced by more efficient collective effort.

In Russia a collective investigation of the cause of cancer is being carried on by the statistical method under governmental auspices. In the present state of our knowledge work of this character is obviously more or less blind, though commendable. The avowed purpose of the



Russian investigation is to compile a map showing that the disease is confined to certain districts, and, if possible, to demonstrate the principles of its distribution. Without going so far from home for evidence of the public interest in cancer, we may point to the work that has been done by New York State; while these researches have differed in method and scope from those undertaken by the Russian government, the motive which prompted them was the same one of public necessity. In Buffalo the general cancer rate increased between the years 1880 and 1899 from 32 to 53 per 100,000, and these figures are not exceptional. It is true that they may be accounted for in part by improvement in diagnostic skill, yet even today the actual number of deaths from cancer is probably everywhere underestimated.

The second annual report of the Cancer Committee of the Harvard Medical School, in regard to the etiology of cancer, is published in full in the April number of the *Journal of Medical Research*. This report has already been alluded to in these columns, but its importance warrants an exact statement of the scope of the work and the conclusions reached. The objects of the investigation, which was conducted by a group of Harvard pathologists and bacteriologists, were to study the following claims of the adherents of the theory of the parasitic origin of cancer: (1) That a proliferation of epithelial cells analogous to the lesions seen in cancerous tumors can be produced by certain well-known protozoa (nodules caused by coccidium oviforme); (2) certain skin lesions characterized by epithelial-cell proliferation are due to the action of a so-called protozoon (molluscum contagiosum); (3) blastomycetes are constantly present in human cancers and are the cause of the lesion; (4) by experimental inoculations of animals with "blastomycetes" true epithelial or cancerous nodules can be produced; (5) the endocellular bodies seen in the protoplasm of cancer cells have a definite morphology, are "parasites," and the cause of cancer.

The conclusions reached after a year of research are that (1) the lesion produced by the coccidium oviforme is essentially a process of chronic inflammation and is not analogous to the lesion seen in cancer; (2) the lesion in molluscum contagiosum is characterized by certain changes in the epidermis, is not due to the action of a protozoon and is not analogous to cancer; (3) the so-called "blastomycetes" ("saccharo-

mycetes") of Sanfelice and Plimmer are torulæ; (4) the lesions produced by these "blastomycetes" (torulæ) are essentially nodules of peculiar granulation tissue, are not cancerous, nor in any sense true "tumors"; (5) blastomycetes are not constantly present in human cancers; (6) the peculiar bodies seen in the protoplasm of cancer cells are not parasites, nor the cause of the lesions, but probably are, in part, at least, atypical stages of the process of secretion by glandular epithelium.

These conclusions will not be universally accepted as finally disposing of the parasitic theory, but they will, without doubt, do much to discourage such efforts as have been recently begun or were about to begin to provide stronger foundation for that theory. If enlightenment concerning the etiology of cancer is to come ultimately from the side of physiological and pathological chemistry rather than from that of bacteriology, this purely negative report of the Harvard Commission will come to be regarded sooner or later as a valuable contribution to scientific medicine.—*The Medical News*.

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#### Carbonate of Creosote in Pneumonia.

By W. H. THOMSON, M. D., LL. D., New York City.

In the *Medical Record* of Nov. 2, 1901, Dr. Leonard Weber reports nine cases of pneumonia treated by creosotal, or the carbonate of creosote, with one death. As I had already formed a favorable opinion of the same remedy in the treatment of this disease in private practice and in consultation, I determined to put every case admitted with lobar pneumonia to my wards in the Roosevelt Hospital, as far as possible, exclusively upon this drug, so far as medication was concerned. Eighteen patients were so treated from May 1 to November 1, 1901, six of them during the months of July and August being under the care of my colleague, Dr. Frank W. Jackson, who consented to continue this treatment with them. Of these patients, fifteen were males and three females; two under the care of Dr. Jackson were boys, ten years old, while the ages of the others ranged from thirteen to forty-five. Two (males) were colored. Of these eighteen patients, one (male) died, and the rest recovered, a record which, so far as it goes, is much more favorable than my usual experience in pneumonia, whether in hospital practice or outside. Both lungs were involved in three patients, all of whom recovered,

while the remainder, six, had the right lung attacked, and nine the left.

As will be seen from the reports which have been condensed from the hospital books by my house physician, Dr. A. W. Bingham, the patients presented a fair average of the ordinary symptoms and conditions in lobar pneumonia, so that they could hardly be called selected cases. Whether they generally ran a milder course owing to seasonal conditions cannot be decided, but at least in three very alcoholic patients, one of whom had double pneumonia, the conditions were severe enough to be worthy of special mention. The first of these, Case III, the man, aged thirty-three, had long been a heavy drinker, and for six weeks previously had severe bronchitis. He was then attacked with chills, vomiting, great pain in the præcordia, rusty sputum, and marked prostration. On admission on the third day, though his temperature was only 102°, his general condition looked very unfavorable, his lips were cyanosed, and his tongue heavily coated and dry. His temperature then rose steadily, and by the eighth day reached 106°. His temperature did not reach normal till the twenty-first day.

The second, Case XV, that of a large powerfully built man, aged forty-five, was admitted as a private patient to the Roosevelt Pavilion, with the following antecedents: He had long indulged freely in liquor, and his attending physician stated that for at least six months he had albumin in his urine, and was often languid and stupid. For the past three months he was very restless nights. Six weeks ago, he had a spasm, which lasted but a short time, and during which he did not lose consciousness. The excitement of the election campaign, in which he was greatly interested, led him to excessive drinking, till at 10 o'clock A. M., October 10th, he was seized with a violent epileptic convulsion, in which he severely bit his tongue. He did not fully recover consciousness till 2 P. M., when shortly afterward he had another convulsion, and then he remained in coma, with recurring convulsions, till 10 P. M., when he was admitted to the hospital, and I was summoned to see him. After my arrival, he had two more convulsions in quick succession. His pulse was 124, and of very high tension. He had passed no urine since 10 A. M., and only 6 ounces were obtained when he was catheterized. It was pale, sp. gr. 1.010, albuminous, and with abundant fatty and granular casts. I ordered him to be bled 12 ounces, with dry cups over the kidneys, and had 1-2 drachm sodium bromide and 20 grains of chloral given per rectum every three hours,

with 10 drops of the tincture of veratrum viride. He had no more convulsions after the bleeding, and the next morning he was conscious, with pulse still of high tension and temperature 100° F., whereupon the veratrum was pushed every half hour till the pulse became softer. On the third day, he developed the full train of symptoms of delirium tremens, and required incessant restraint. This state continued for two days, when his temperature suddenly rose to 104.4°, and he expectorated a quantity of bright red blood. On my visit to him that day, I found that pneumonia had fully set in in his right lung, and I was not inclined to give a favorable prognosis, considering the usual course of such cases. The creosotal was given continuously, 15 grains every two hours night and day for ten days, and then at longer intervals, with a gradual descent to normal in three weeks.

The third patient, Case XVI, aged thirty-three, had been a heavy drinker, and stated that he had pleurisy four weeks before admission, from which he had quite recovered, until four days ago, when he had a severe chill, followed by fever, headache, pain in the right chest, cough with scanty sputum, and dyspnoea. Admitted October 21st, in a very apathetic state, with flushed cheeks, pulse 120, full and strong, arteries thickened, breathing shallow, and abdomen quite tympanitic. Temperature 104.4°, respirations 40. Examination showed consolidation of the right lung posteriorly up to the axilla, with pneumonic râles over the lower lobe in front. He was ordered creosotal, 15 grains every two hours, if awake. The course of his temperature then became very irregular. The next day, the fifth of his disease, it was 100.2° in the morning, and 102° in the evening, but on the next day it was 105.6° in the morning, when pneumonic râles, followed by dullness and bronchial breathing, were found over the lower lobe of the left lung, both posteriorly and anteriorly. The right lung resolved completely by the thirteenth day, but the left not till the twenty-fourth day.

On the other hand, the patient who died (Case V), who was also an alcoholic subject, though he stated that he had been only moderately so, had the creosotal as freely administered as the others, and at first he did not seem to present a specially unfavorable case of the disease. The temperature, however, continued persistently high, and was quite unaffected by the medication, reaching before death 107°.

The remedy, also, can hardly be credited with the favorable result in Case IV, as the man was admitted on the sixth day of his

illness with a temperature of 104°, which was followed in about twelve hours with a crisis drop to nearly normal.

That the drug may exert a special effect upon the course of pneumonia is rendered probable by the peculiar course of the temperature after its administration, a fact which I had noted before in other cases, and which is well illustrated in the present list. Thus the disease terminated here by lysis in twelve, and by crisis in only five. In a number of them a fall in the temperature of from one to three degrees occurred within twenty-four hours after beginning with it, but the next day it would rise again, and so continue with a very irregular course for a number of days before it reached normal.

Carbonate of creosote, or creosotal, seems also to affect favorably that very undesirable complication in pneumonia, tympanites, which was pronounced in five of these patients. As I use this drug freely in the treatment of phthisis, I have been struck with its greater toleration by the stomach for prolonged periods than any other agent of this class, such as creosote itself or the guaiacol carbonate. In pneumonia, I prefer to give it in 15-grain doses every two hours, night and day, or 180 grains in the twenty-four hours, which is about three times the amount prescribed by Dr. Weber.

I have never noted any depressing effect by it on the circulation when so administered, nor need there be any fear entertained of its acting injuriously upon the kidneys, even if they were previously diseased, as in Case XV. In one patient, a lady with general anasarca, hæmaturia, and abundant tubercle bacilli in the urine, whom I saw in consultation three years ago, creosotal was taken continuously by my advice for nine months, after which the bacilli wholly disappeared from the urine, and she is now in good health. My usual formula for administering it is:

℞ Creosot. carbonat., 3 iv.

Glycerini, ʒ j.

Aq. menthæ, ad Oss.

M. Dose. Tablespoonful in water.

A brief synopsis of eighteen cases is then given.—*The New England Medical Monthly.*

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#### Treatment in Tumors.

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##### TREATMENT.

A very great aid in the therapy of tumors is an intimate acquaintance with their natural history, the influences of heredity, the effects of local and constitutional conditions, and their pathological characters. Very many

surface growths disappear of themselves, others remain throughout life unchanged; some vanish after acute local changes involving the parts where they are lodged; others, again, after varying periods of quiescence, undergo malignant changes or great augmentation in volume.

Professional aid is never sought for in this class of cases, unless the excrescence constitutes a blemish in exposed parts, unless it becomes a source of discomfort, or apprehension is excited by a notable increase in size.

Treatment is *constitutional* or *local* or both combined, in various types of the *non-malignant*. In others the resources of surgery are invoked. The aim in view is to destroy the tumor by the *safest* and *simplest* means. In the hands of an experienced operator, with all the modern accessories of surgery, immediate excision is the ideal treatment for those growths which resist constitutional measures. But there are many who have an instinctive dread of any sanguineous procedure, however trivial. The prejudices of the individual must be respected; besides, we should never overlook the possible danger attendant on anesthesia.

In those refusing excision by the scalpel, we may often resort, with signal advantage, to sclerogenesis, or parenchymatous injections, which will provoke suppuration, or, on the other hand, promote absorption. Many small, papillomatous, cystic or vascular growths may be easily destroyed by corrosive acids or the thermo-cautery. Electrolysis or the alternating faradic current serves an admirable purpose in a large group of cases.

In operation on *exposed parts*, as the face or neck, it is highly important, especially in the female, to leave the smallest possible scar. When the growths are diminutive and lie near the surface, local anesthetics, eucaïne, cocaine or chloride of ethyl spray, will quite completely supersede pulmonary anesthesia.

In labial epithelioma, my preference in nearly all cases is for the *escharotics*, the acid nitrate of mercury being the most satisfactory. It may be repeatedly applied with a glass rod. It acts with special energy upon the neoplastic elements and is followed by a scabbing over of the ulcer. This mode of treatment is more or less painful and may be tedious, but in my hands in cases of early lip-cancer it has never failed.

Excision is a much simpler and more prompt mode of treatment, but it always involves the removal of more or less healthy tissue, leaving a deformed and tightly drawn lip. I am confident, that if the profession would more frequently avail itself of the

chemical caustics in cutaneous neoplasms we would greatly narrow the field of cancer quacks, and induce many to submit to treatment who will otherwise refuse any cutting operation.

From the neck we come to the thorax, to parts concealed by garments, and where we are less influenced by cosmetic effects than durable results. For this very reason, in parts that are covered we are seldom called upon to remove growths unless they are a source of suffering, or have attained a large volume.

The first and fundamental step in the operative technique in the excision of tumors in covered parts is a large incision through the skin and fascia. Effective hemostasis is second; the remainder of the procedure is a matter of detail.

In operations on the breast we must have a care that we do not mutilate our patient, and should not forget that this gland is an integral part of the generative system. Hence, we should not hasten to cleave it from the body until we are assured, beyond all possible doubt, that it is the seat of malignant disease, for a large portion of new growths in the breast or at its periphery are benign, and should be enucleated without sacrifice of the gland. In the observance of the new propaganda of "cutting early and cutting wide," in tumor excision, there is great danger when we essay to operate on neoplasms of dubious origin, as so very many are in their early stages.

In malignant growths of the *mammæ*, I have not yet been able to convince myself of the justifiability of those enormous sacrifices of tissues and structures made necessary by a theory which is based chiefly upon unsupported speculation; particularly when I note recurrence equally early in these cases as when the chest wall is spared. The displaced shoulder, the neuralgic, heavy, bloated, nearly useless arm, left after these wide dissections, present a gruesome spectacle in all, but is the more melancholy in the wage-earner or the mother of a family.

Tumors of the abdomen are treated on the same general lines as those of the upper trunk. But, in the groin or scrotal cases, rational therapy rests almost wholly on the differential diagnosis between hydrocele of the infundibular fascia or the tunica vaginalis, cystic disease or hernia.

I have found cysts of the scrotum to occur very much more frequently than is generally thought. Very often they are tapped, under the assumption that they are hydroceles; several of such cases have come under my

care in which the cysts were enucleated entirely free from the tunica vaginalis.

In the enucleation of these cysts we will frequently discover various elements of the cord, so intimately blended with the thick capsule that a very delicate dissection is necessary in order to safely isolate them.

Tumors involving the members are dealt with on general principles. Here one may simply induce artificial ischemia and operate in a bloodless field; moreover, we may largely dispense with pulmonary anesthetics. If we begin with a safe groundwork of accurate diagnosis and observe to the utmost the principles of modern osteo-plastic methods in dealing with diseased bone elements, the best possible results will be obtained.

The correct management of thecal ganglia, or bursa mucosa, calls for more than passing notice. The opening of a synovial membrane by accident or art is never a trivial matter, and all these bursæ open either directly into a tendon sheath or directly into the capsule of a joint. This explains why we should endeavor in all these ganglia at or near the wrist to rupture them by concussion force rather than attempt to dissect them out. When their investing capsule is thin, a moderate blow will rupture them, and there is little more to do; but sometimes their capsule is very thick and resistant, and these simple means will not avail. Then we must treat them by free incision. Enucleation of them is difficult and is usually followed by widespread inflammation, sometimes of a grave character. Aspiration or injection is neither safe nor satisfactory. In my experience, in this class nothing answers so well as a free incision and evacuation of the contents. After evacuation under rigid asepsis, a simple moist dressing is applied, and the wrist fixed in a splint and kept severely quiet until repair is well advanced.

In housemaid's knee, on the contrary, complete excision, with simple dressings and rest to the joint, offers the best possible mode of treatment.

Removal of tumors of the neck is always a procedure not to be lightly undertaken. Their surface characters, their apparent superficial location, and their free mobility are most delusive features to the inexperienced. Quite invariably they maintain close connections with the large, deep blood trunks with highly important nerves and other structures. In all these cases it is well to make a free incision through the integument and deep fascia, so that vital parts be laid bare under the naked eye.

The formidable danger here is *large hemor-*

*rhage*, something which can never occur in experienced hands, and under proper provisions.

*Inoperable tumors.* In this situation, as elsewhere, there are at times *inoperable tumors*; "when fools rush in where angels fear to tread;" wherein the conscientious and experienced decline to participate in a tragedy, or rob the afflicted of her few remaining days. Operating in this sad class brings more discredit and contempt on legitimate surgery than are compensated for by its many brilliant triumphs.

*Carbuncle*, always a painful lesion and sometimes dangerous to life, may be nipped in the bud, so to speak, or arrested in its early ravages, by a simple and never-failing remedy, displacing altogether deep bisection or the more formidable procedure of excision. The hypodermic employment of pure carbolic acid here is a specific. In the papillary stage the deep injection of one or two drops of carbolic acid will at once abort any further advances, but even though the purulent stage is reached, multipuncture and injection will instantly annul the excruciating pain and arrest further spread of the infection. Its action is escharotic, coagulating the albuminous elements of suppuration, and inhibiting any further microbic action. After its employment in advanced cases, we employ emollients until the necrotic tissue is thrown off and the ulcer has healed.—*T. H. Manley, M. D., International Journal of Surgery.*

#### The Use and Abuse of Morphine after Abdominal Section.

L. H. DUNNING, M. D., of Indianapolis, Ind., Professor of Diseases of Women, Medical College of Indiana; Chief of Staff of Deaconess' Hospital.

There seems to be a wide divergence of opinion among English and American surgeons as to the benefits of the administration of morphine and other preparations of opium after an abdominal section, if we take the expressions found in medical journals as a guide to the views and customs of operators. The questions we propose to briefly discuss in this paper are: What are the indications for and benefits derived from the use of morphine after abdominal section? What are the harmful influences of this drug when improperly used?

Unquestionably, pain is considered the chief indication for its use after an abdominal section. It is here, however, that the great divergence of opinion regarding the advisability of its administration is manifest.

The early operators almost invariably administered a large dose of opium as soon as the patient was placed in bed or had recovered from the effects of the anesthetic.

The form of this drug was usually laudanum and the method of administration by the rectum. The first dose was followed by others as soon as the patient began to complain of pain. At the present time it seems to be the consensus of opinion among most operators that some form of opium should be given where the pain is very intense. Of late codeine has come into general use and is given hypodermically or by suppositories. The advantages of this drug are that it does not constipate and is not liable to be followed by vomiting. It is, however, transient in its effects, so that it must be repeated, and even then it is of little value for relief of pain except in the mildest cases. The writer in his practice has endeavored to substitute codeine for morphine, but has found it of little value. The administration of one grain of codeine hypodermically will modify the pain and will give comfort and rest for one or two hours, but not longer. So little benefit have I derived from its administration that I have almost abandoned its use for the relief of pain. There are those, and they are not a few, who condemn the use of morphine in toto after abdominal section.

Some two or three years ago the writer listened to a paper read by a prominent operator who condemned the use of morphine in the strongest terms. Some one asked him what he would give to relieve pain if it were severe, and his reply was, "nothing," that he would encourage the patient to bear the pain; in the discussion which followed his paper, he remarked to his interrogator: "If you would avoid the use of opium in any form, your mortality would be reduced 5 per cent." These statements were very positive and yet seemed to meet with the approval of many of the operators who listened to him. The last statement we think, however, was far from the fact, as the recorded experience of some of our most successful operators show. They have attained their very low rate of mortality while using this drug.

I cite but one instance, that of Mr. Tait in his prize essay upon diseases of the ovaries. He states that he had just completed a series of 100 consecutive ovariectomies, with but two deaths, and a little further in the same chapter he says: "Should there be pain after the operation, I direct the use of a suppository containing one-fourth grain of morphia; but with this

agent I am extremely cautious, for my patients never get a single dose of morphia or opium more than is absolutely necessary to relieve pain. Like other operators, I have long since discarded the routine use of opium, which was the fashion at one time, a practice brought into existence by the idea that it prevented the occurrence of peritonitis." Undoubtedly, Mr. Tait in these statements has given us the key to the rational employment of this most efficient drug.

Dudley,<sup>1</sup> in his recent work, has cogently stated the objections to morphin and opium in the following language: "Opium and its preparations lock up the secretions, induce nausea, arrest peristalsis, cause distention, mask other symptoms which might otherwise give warning of approaching danger; they moreover counteract the influence of cathartics and would therefore prove a serious obstacle if it became necessary to move the bowels. Such drugs, if given at all, should be given with the greatest circumspection."

The writer is in accord with facts and principles stated in this quotation. Let us, however, consider their objections somewhat in detail to see if they may not be counteracted.

The first is it locks up the secretions. Under the old methods of preparatory treatment, when water was withheld and the patient actively purged by salines, the diminution in the amount of urine, the dryness of the skin and costive condition of the bowels were very noticeable and very distressing. Now, that copious draughts of water are given several days in advance of operation and a large enema of normal salt solution given immediately after the operation, these objections are largely removed.

That many patients suffer of nausea and vomiting as the effect of an injection of morphin, there can be no question. I know of no way of effectually preventing this most unpleasant and often serious after-effect of the drug, but since I adopted the plan of questioning the patient regarding the effects of the drug upon former occasions of its use and avoided giving it to those whom it invariably nauseates, I have had much less annoyance from this source. The administration of morphin, combined with atropin, soon after section is usually objectionable on account of the excitement of the heart's action and the dryness of the tongue and throat the atropin induces. A second minute dose of morphia as the nausea begins is not infrequently effectual in preventing this symptom.

Morphin does arrest peristalsis, cause distention and counteract to some extent the action of cathartics. However, these objectionable features may be largely counteracted by the administration of a rectal injection of normal salt solution after the operation and by the subsequent rectal injection of milk of asafetida, and by the systematic yet prudent use of the colon tube.

The early action of the bowels is conducive to a quick recovery of the patient. It has long been the practice of the writer to secure an action of the bowels within the first forty-eight hours. This is accomplished sometimes by an S.S. enema, at other times by an enema of four ounces of the saturated solution of Epsom salts, to which has been added one ounce of glycerin or lastly, in case of failure of the above-mentioned measures, by the administration of small doses of calomel followed by a saline.

In cases of extreme restlessness the efficiency of an opiate is most marked. Every abdominal surgeon has seen many marked illustrations of this fact. One recently under my observation was most striking. The patient, a school teacher 43 years of age, was operated upon by vaginal hysterectomy for the extirpation of a fibroid uterus, pus tubes and a small ovarian abscess. The operation was not difficult and was quickly done by the ligature method. The patient was one of those extremely nervous persons who are intolerant of pain or restraint of any kind. She was loud in her complaint of pain and so restless that it was difficult to keep her in bed. Two one-grain doses of codein were given, and also one rectal injection of hot water, containing 20 grains of sodium bromid and 15 grains of chloral hydrate, all with little or no effect. The administration of one-sixth of a grain of morphin quickly brought relief and quiet, calm sleep. It was not followed by an unpleasant symptom. The whole aspect of the case was changed and the patient went on to a speedy and comfortable recovery.

Persistent vomiting, not due to peritonitis or obstruction of the bowels, but of reflex origin, is not infrequently relieved by the administration of one-eighth grain of morphin.

The place of morphin in the treatment of post-operative peritonitis is far from being settled. My own experience leads me to avoid its administration except in rare cases, such, for instance, as those in which the bowels have acted freely and in which there is no vomiting, yet there is great restlessness and pain. Even in such cases it is so

<sup>1</sup>Dudley: Diseases of Women, p. 137.



apt to induce vomiting that it should be prescribed with the greatest circumspection. In sepsis all are agreed that morphin is harmful.

The chief etiological factors of post-operative peritonitis are trauma and infection. Recognizing this the surgeon is prone to become dogmatic and absolutely proscribe the drug. Unquestionably, not a few valuable lives have been sacrificed because the attendant or nurse would not heed his dogmatic statement.

There is another condition concerning which I would speak of the use of morphin, viz., in those individuals who are addicted to the use of the drug. The terrible depression, great restlessness and acute pain caused by withholding morphin from such persons, added to the shock and other dangers of the operation, may be the determining cause in producing a fatal issue. Immediately following an abdominal section is not the time or occasion to break the morphin habit. It is, however, an appropriate time to begin diminishing the accustomed dose, so that a little later it may be entirely withdrawn.

In secondary shock, occurring one, two or three days subsequent to the operation and due to fright or over-anxiety and accompanied by great restlessness, the administration of a small dose of morphin is often followed by a calm sleep and entire relief of the patient. I am aware that there are those who deny the presence of secondary shock and who teach that so-called secondary shock is a condition due to secondary hemorrhage. I wish to cite one of my cases illustrating my idea of secondary shock. Mrs. A. was operated upon in a private hospital by abdominal section for the extirpation of a small pyosalpinx. The operation was an easy one, the patient reacting well. Everything went on in a normal manner for thirty-six hours, when a patient who had undergone a severe operation, was placed in a bed across the hall from her. The newly arrived patient suffered intensely and was boisterous, crying out in agony that she was dying. My patient heard her every moan and outcry, became frightened and much agitated. Her temperature fell, her pulse became rapid, her skin blanched and respiration sighing.

This is the condition I found her in half an hour after the serious symptoms appeared. She was moaning and turning in bed and begging piteously for her friends, whom she wished to see before she died. For a little while I halted between two opinions, now thinking it was shock and now secondary

hemorrhage. We applied heat and friction to the surface, and gave stimulants hypodermically. In a short time a bright spot appeared upon one cheek and one ear became livid. It was plain to my mind we had to deal with shock. I directed a large high enema of hot water and the administration of one-eighth grain of morphin. I sat down quietly by her bedside and assured her that she would soon be better and would recover. In a few minutes her restlessness gradually disappeared. She became calm, then drowsy and finally slept. The sleep lasted for an hour. During that sleep the surface of the body warmed and the color returned. She awoke at the end of an hour refreshed, and at the end of four or five hours every evidence of shock had disappeared except that she was fatigued. Morphin played an important part in the restoration of this patient. I wish to briefly summarize as follows:

1. The routine use of morphin and other preparations of opium are to be condemned.

2. For the relief of severe pain and marked restlessness morphin is much superior to codein, though more prone to be followed by unpleasant symptoms, such as nausea, vomiting, diminished secretions and constipation of the bowels.

3. The serious after-effects of morphin may be largely overcome by the drinking of liberal quantities of water before the operation and the rectal injection of a pint or quart of the normal salt solution immediately after the operation, the systematic use of the colon tube and the early action of the bowels.

4. In persistent vomiting, not due to sepsis or peritonitis, small doses of morphin hypodermically not infrequently affords relief.

5. In secondary shock, due to fright or over-anxiety, morphin in small doses is often a potent remedy.—*Jour. Am. Med. Assoc'n.*

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In the treatment of hay fever, Dr. Somers, of Philadelphia, says that Suprarenal Extract is the best remedy we possess. In this statement Dr. Solis Cohen, a sufferer from this disease, seems to agree. The drug is given internally, one 5-grain tablet every two hours. Other specialists combine this treatment with local applications of a solution of the gland.

BEAUTIFUL SURROUNDINGS.—“Do you think it will take, doctor?” asked the fair young bud who was being vaccinated.

“Well,” replied the gallant doctor, “if it doesn’t take on such a pretty arm as that, I’ll have no respect for vaccine hereafter.”



### The Progressive Principle in Rational Infant Feeding.\*

By HENRY L. COIT, M. D., Attending Physician to The Babies' Hospital, Newark, N. J.

The plan to adapt its food to the needs of the growing infant, with a reasonable degree of accuracy, has now been before the medical profession in this country since 1882, when Meigs, following the work of Biedert ten years previously, taught the importance of adjustment by his study of woman's milk and the adaptation of an artificial mixture to substitute feeding; and when ten years later, in 1890, Rotch awoke the profession from its indifference and gave the first impetus to a general interest in the study of this important subject.

The original contributions of Rotch to percentage adjustment, laboratory modification and prescription feeding have been the valuable starting point from which all recent advance in this subject has proceeded. The fact that methods employed in the laboratory were not available for general use made it necessary that others should devise ways and means by which we might reach at least approximately the high ground taken by Rotch in his teachings.

Later, through the writings of Holt, Chapin, Seibert and others, rapid strides were made in the advance of our knowledge of this difficult subject by various methods designed to facilitate the accurate modification of milk.

Percentage feeding, however, was still beyond the ken of the great mass of physicians and consequently beyond the reach of all save the favored few of the great mass of infants whom these teachings were designed to benefit.

Finally the door was opened to those who were willing to labor in order to succeed, by the publication, in 1897, of Westcott's method for deriving percentage formulæ by accurate percentage calculation.

Following this, several methods of calculation were suggested, one by Baner, one by Coit, and a modification of Westcott's system by Taylor, whereby by various combinations, more or less accurate, of the percentage of fat, proteids and sugar could be determined in a mixture.

These systems of modification were supposed to be made available for the so-called home modification of milk—and in the absence of the milk laboratory, also for the guidance of those who required accurate

milk adjustment for the private case, or for large numbers of delicate infants lodged in hospitals and other institutions.

What use have we made of the foregoing facts? Thirty years have elapsed since the scientific study of this subject began, and it is probably true that in no department of medical work is so little general interest manifested today as in that of infant feeding.

If 50 per cent. of the race are to be fed by artificial methods, then there is urgent need that not only pediatricists, but every general practitioner should be familiar with infant dietetics, milk modification, and the adaptation of suitable mixtures to the individual case.

It is probably true that the majority of physicians still carry in their pocket a recipe for a recommended milk mixture which they offer to every infant of every age or stage of development, and in the event of failure, conclude that the child cannot take milk and descend to some one of the horde of manufactured substitutes.

It is not surprising that no awakening occurred for years after Meigs taught its importance; it certainly is unfortunate that after the subject was elucidated and classified by Rotch and his co-workers, a decade more should elapse and still the rank and file of the profession remain unprepared for the work they are called upon to perform.

An explanation for this state of things must be found, not in a lack of literature, but we think in the fact that most of the methods hitherto taught require too much reliance upon skilled labor back of the physician, and that in the effort to make them available for individual cases, the element of flexibility, so essential to the progress and well-being of the little patients, is lost.

That the physician should be able to think in percentages, construct his own formulæ, reduce them to simple terms and transfer the progressive modification of the mixtures to the caretaker are absolutely necessary if he would do good work among the larger number of his feeding cases.

Therefore simpler methods of percentage feeding are demanded by the profession today; methods yielding fairly accurate results, as regards the percentage calculation of constituent elements, the construction of formulæ and their conversion, the combination of materials used, and the continual advancement from minimum to maximum capacities in their application to individual cases.

The average doctor looks upon scientific infant feeding as a gigantic undertaking, and

\*Read before the Section on Pediatrics, the New York Academy of Medicine, April 10, 1902.

is repelled by his conception of its magnitude. As the knight of old looked upon the golden fleece guarded by a great dragon, so he contemplates the maze of chemical and physiological facts, and algebraic equations connected with percentage determinations, and their relation to the nutrition of the young. There is no gainsaying the fact, that an enormous amount of labor entails upon those who master this intricate subject, and it would seem, therefore, if the race is to be fed, it is incumbent upon those who have by labor killed the dragon for themselves, to kill it in a metaphorical sense for others by simplifying their methods, that the profession, and indirectly the children of the masses, may secure the coveted golden fleece.

The problem before us is a difficult one. Market-milk is not a constant quantity; its variations in fat are as wide as the distribution of breed in the milk herds from which we derive the basal product whole milk. The constancy of the fat in the cream to be employed is quite as essential to success in percentage feeding as standard solutions are to volumetric chemical analysis. Therefore every physician must adopt some method by which he can obtain and determine in the milk a uniform standard for his modifications, as milk cannot be assumed to be an average product. By some plan of systematic chemical reports for a given supply the physician should be able to get his standards of super-fatted milk; moreover these materials should be obtained with the least possible disturbance of their proximate principles, especially the milk-fat, for it is the conviction of good observers that the violent mechanical agitation of milk by the centrifuge is detrimental to it.

In 1897, at a meeting in this place, I suggested that it would greatly simplify the use of milk for this purpose if a uniform super-fatted gravity cream could be delivered by dairymen which would contain 10 per cent. of fat, to be called decimal cream. Following this, in 1898 I suggested a system of milk modification, designated the decimal system, and designed to simplify the use of decimal cream for modifications and having reference to approximate percentage composition in the ultimate mixtures. This system employed in its calculations but one mathematical principle—multiplication; the working formulæ required, besides water, a 10 per cent. fat cream (No. 1 by diluting gravity cream with half its bulk of water, No. 2 a decimal top milk), and a 10 per cent. sugar solution—the proteids estimated by a table (*Archives of Pediatrics*, May,

1898), showed the proteid and sugar value of the cream employed, the proteids being increased, if necessary, with a fat-free skimmed milk or whey.

By this method working formulæ are calculated by the quantity of food desired expressed in ounces, reduced to cubic centimeters by multiplying by thirty, this product in turn multiplied by tenths determines the quantity of standard cream or sugar solution for the required percentage of fat or sugar, the formula being re-converted into fluid ounces if desired. This system is used by many physicians and some institutions, but its chief advantage consists in the fact that approximate percentage modification can be taught to the nurse or the mother.

The chief point to be insisted upon in any system of accurate or approximate feeding is the known composition of the standard materials.

For most practical purposes, the fat and sugar standards are the only ones the percentage composition of which need be known, for, as will be shown later, the mixed proteids or lactalbumin may be gradually added in a progressive formula designed for advance from a minimum to a maximum point in each individual case.

The merits of any system of modification depend upon its treatment of the constituents of the finished food, its percentage adjustment, its flexibility, the readiness with which physicians adopt and employ it and the ease with which its scientific terms may be converted into simpler ones.

That the foregoing is perfectly consonant with the requirements of maternal feeding there can be no question. There is no fixed and unchangeable composition in woman's milk. The percentages are not uniformly accurate for fat and proteids, but they are approximate, and there is every reason to believe that the secretion is progressive in quality as well as in quantity during the normal period of lactation. Woman's milk is furthermore adjusted to the prescription written by nature, so that the blond offspring gets one modification, the brunette another, and the colored baby still another.

This leads me to the consideration of a principle in infant feeding which involves the idea of progressive advance, not only as regards the capacity of the infant for bulk, but also for increasing nutritive strength in the mixtures. This adds one more designation to the long list of qualifying terms as applied to methods of infant feeding, but the principle of progression is not new, for it has always been employed by those who have

made a comprehensive study of the subject.

It is interesting to note that Biedert, thirty years ago, taught the importance of progressive advance in the strength of artificial mixtures, and, in order that the pioneer workers in the field may have their due credit, it is well to remember that the younger Meigs mentions the use of whey in cream mixtures for the purpose of augmenting the noncoagulable albuminoids.

Progressive infant feeding has its chief justification in the fact that the great majority of the cases we are called upon to feed are not well but sick. The chief fault of most of the authors on this subject is that they write for well babies, as may be seen by referring to the published tables and feeding charts. Moreover every baby is a law to itself with regard to its food, so that every case must be individualized with reference to its physiological and its chemical relations in order to fulfill the demands of uniform growth.

It is essential to the well-being of our feeding cases that they should be seen at least once every month, even though they are well, in order that a new set of formulæ may be written. When the case is suffering from some form of malnutrition, daily supervision is often necessary in order to meet the fluctuations in the child's condition.

Many feeding cases go beyond our observation simply because the mother does not see the necessity of advance in the feeding, and these are more important because of the insidious consequences of neglect.

The progressive principle is opposed to the stereotyped and fixed methods of feeding still so prevalent among certain classes. The baby sick or well is a fixed quantity for the time being, and therefore in order to fulfill Northrup's desideratum of "feedings to fit," the food must be the adjustable end of the combination, and as the baby advances in growth or capacity for food the same principle obtains.

The majority of cases we are called upon to treat are suffering from some form of starvation, with its corresponding degree of fat, proteid or sugar incapacity, growing out of the failure to employ these functions. It should be borne in mind, also, that this condition results quite as often from poor and insufficient nursing as it does from the very common use of condensed milk or dextrinized, malted or cereal foods. It is therefore often necessary that we begin our feeding with very low percentages and gradually strengthen the mixture; the point of beginning deter-

mined, of course, by the digestive capacity of the child, and a careful inquiry into the antecedents which are usually many and varied.

Cases are often brought to us which, at one or two months, were given a mixture suitable for them at the time, and at six or eight months are found taking the same food, and presenting a very defective nutrition; or, in like manner, a child of ten months may be found subsisting on a four months' diet. Such patients should not go beyond our observation long without some provision for advancing their food, if possible by a progressive series in the formula.

Likewise we encounter a class which are suffering from fat, proteid or starch indigestion, due to an excess of these elements in its food, or the employment of an injurious combination of materials entirely foreign to an infant's diet. The defect must be discovered, a temporary adjustment made with reference to the troublesome elements and the weakened function encouraged to gradually increase its capacity and finally perform its maximum work.

In the feeding of premature infants it is all important that caution be enjoined with reference to the use of artificial food. The most delicate management is necessary in order to establish their digestion, careful progressive formulæ must be prepared, and it should be borne in mind that very slight variations from correct percentages will often defeat our object and destroy the child.

Infant dietetics, while it rests upon a scientific basis, is yet very largely an art, and engages all the mental resources, as well as the judgment of the physician, in his efforts not to underfeed or overfeed his patients. In order to accomplish his best results he must have the co-operation of the caretaker, and in difficult cases he must himself direct and establish the order for management and care.

In progressive feeding, there are two points of procedure: First, the present capacities of the infant; second, its normal capacities if it were well and had attained its maximum growth. These two points are essential because they represent the possible dietetic limitations of our patient. When these have been determined two formulas may be prepared with these boundaries in view, one for the starting point, the other representing the line toward which we should steadily advance.

The formula required for the condition in which we find our patient being determined, it must next be demonstrated that the mixture is well borne. The formula for the

maximum mixture being determined, it greatly facilitates the successful management of the case to arrange the working formula in a series, with the one at the left, the other at the right of the chart and inserting intermediate figures for advancing the proportions of the changeable ingredients and diminishing the diluents until the maximum formula is reached.

In the case of a normal infant, the progressive formula arranged in like manner should, of course, have reference only to the usual advance and growth of the period for which it is given. This progression should be steady from birth to weaning, and be under the periodical supervision of the physician.

#### STANDARD MATERIALS.

*Decimal Sugar Solution* consists of a solution of sugar of milk in the proportion of one ounce by weight in sufficient hot water to complete ten fluid ounces.

*Decimal Cream No. 1.*—The top six ounces from one quart of fifteen-hour bottled milk, plus water three fluid ounces. This mixture equals nine fluid ounces, and contains 10 per cent. of fat. In using Cream No. 1 it is sufficiently accurate to estimate the proteids and sugar carried by it as one-quarter of fat.

*Decimal Cream No. 2.*—The top eleven ounces from one quart of fifteen-hour bottled milk. This top milk contains 10 per cent. of fat. In using Cream No. 2 it is sufficiently accurate to estimate the proteids carried by it as one-third the fat and the sugar as one-half the fat.—*The Dietetic and Hygienic Gazette.*

#### \*On the Subject of Phthisis.

By DR. LOUIS BARRAN.

As every man is, in a measure, the master of his own fate, he is also, to great extent, the master of his health. And this holds true of tuberculosis. The bacilli of consumption are not in themselves so much to be dreaded as the unhealthy tissue which forms a favorable medium for their inception and development.

In contradiction to this theory Dr. T. Mitchell Pruden, the renowned pathologist, says: "Tuberculosis is caused by ptomaines, and the bacilli found in consumption is a result of the disease." In a vigorous, well-nourished body the bacilli are harmless. Innumerable injurious bacilli float around and are absorbed and no harm results. Were it

not so the world would soon be depopulated. Pure blood supplied with normal cells fills the healthy body so completely that no space remains for the development of tuberculous bacilli.

The healthy human organism may within certain limits be considered an apparatus for self-disinfection. Innumerable quantities of germs surround, pervade and pass through it without leaving any appreciable trace of their contact. Thus a healthy and well-nourished body is endowed with great powers of resistance to the action of most species of bacilli, rendering itself aseptic by virtue of its own healthfulness. Professor Traube experimented in 1876 by injecting a quantity of pus into healthy dogs. After twenty-four hours he found no trace of it in the system; his results, however, were different when the quantity was increased. Dr. Trudeau inoculated fifteen rabbits with tubercle bacilli; ten of them, which were kept in damp, impure air and on improper food, developed tuberculosis. The other five were permitted to run about in good, pure air and were well nourished. Of these only one died of a resultant tubercular affection, and four remained well. The experiments of Brown-Sequard, which were made before those of Dr. Trudeau, yielded still better results, since of all the animals inoculated with the tubercular virus, not one was lost. He ascribed these results to their being kept in a well-aired, open place, supplied with abundant nutriment.

In patients who had only recently developed symptoms of phthisis, Brown-Sequard, Stokes and Blake aborted the disease by the same treatment of saturating the systems with pure air and good food. It must be apparent, therefore, that the power of self-disinfection depends chiefly upon two factors:

1. Thorough impregnation with the oxygen of the air.

2. Generous alimentation.

These agents must be relied upon to give to the stomach power to digest certain bacilli, as well as to the blood that richness, vitality and vigor which enable it to ward off an invasion of bacterial foes, and by the aid of which they can be most speedily repulsed, and driven from the system, even though they have entered the circulation at a vulnerable spot. In addition to these two important factors, several other hygienic requisites must not be overlooked, such as congenial temperature, sunshine, clean, dry soil, pure water, sufficient exercise, etc., all of which are valuable as accessories to produce the full beneficial effect of pure air and abundant food.

\*Translated from the German by Amelia Catlin.

The fatty tissue is not necessarily a protection in itself but must be incorporated into the working economy of the system; otherwise it becomes a clog, retarding circulation. Hence we find consumption even in fleshy people who do not exercise enough to produce requisite metamorphose of the adipose tissue. In an industrious, active man the healthy ivory-tinted fat (unlike the white of a drunkard) is an important factor in the animal economy, supplying heat and regulating the temperature. In the idle, inert person the superfluous fat is apt to become like the fuel in a stove, so overfilled that draft and combustion become insufficient and the room remains cool. Very fleshy people are known to chill and succumb to cold easily, but this is improved by a life of physical exercise.

Nutrient, like capital, is only of value when well used. In a majority of cases the reproach of eating too much is not justified. One does not eat too much but works too little. Only by a vigorous circulation can each and every tissue of the body be supplied with sufficient blood for the proper nourishment of every cell; a most important consideration, as tuberculosis, is in most cases the result of deficient nutrition, often caused by poor circulation.

It is often noticed that the removal of tuberculous tissue, e. g., from the knee or abdomen, results in the cessation of the disease and the cure of the patient. This happy result was really caused by the removal of the tuberculous barriers which impeded circulation. Furthermore, it must be remembered that the amputation of tuberculous carious extremities lessens the amount of tissue to be nourished.

A brisk circulation is therefore a life-giving principle of the organic world, and nothing conduces more to this than healthful physical avocations conducted in pure open air, such as forestry, gardening, farming, seafaring, etc., or those pastimes as rowing, swimming, mountain climbing or gymnastics, also performed in the open air, especially if carried out, as in Europe, under the eye and direction of a physician. Of untold advantage to Europe are the Alpine and Carpathian clubs, which not only give great physical benefits, but add immeasurably to the pleasure of life by cultivating a perception of the unadulterated beauties of nature. It would be an immense benefit to us if such clubs, as far reaching and comprehensive as those, could be established here. The ascent of a mountain peak is arduous, but the ex-

hilaration and delight one feels on reaching the goal amply compensates.

Both mountain climbing and gymnastics increase the contractive force of thorax so that inflaming and irritating particles are thrown out, consequently even convulsive coughing allayed. No one can overestimate the value of well regulated gymnastics, as the freshened blood is hurried to every part of the system; the coldness of the extremities disappears, the deleterious germs are eliminated, and even the upper lobes of the lungs, where the bacilli or tuberculosis first appear, become again sound. I recall patients who, in spite of liberal nourishment and most careful nursing, showed no signs of improvements, but who, under gymnastic treatment, recovered and are still enjoying good health, although from consumptive families, where brothers and sisters had succumbed to the dread disease.

The human organism, both as regards degeneration and development, is susceptible of modification. Fortunately for tuberculous patients, the chest will be expanded and enlarged by judicious exercise. It is well known that Sandow, by such exercise, developed from the weak, sickly boy into his present condition of exceptional strength. It must not be forgotten that the amount of food taken must correspond to the amount of exercise, for even iron muscles will not exclude tuberculosis. Gymnastics should always be performed in well-ventilated rooms. Unfortunately in one or more of the largest institutions in the city this is not the case. Far better, as in some of the public schools, in the open air, and, best of all, in certain woods near the city. We recall with great pleasure the excursions of our student days, when, under the guidance of our professors, we went to their very source and studied biology, botany, geology, etc., in the beautiful Carpathian mountains and valleys, and then in the pure atmosphere of the pines and balsams derived the full benefit of gymnastic drill.

Climate, on which so much of both the inception and cure of consumption depends, is influenced principally by mountain ranges. We find those places most favorable where mountains running east and west protect from strong cold winds, so that even high altitudes are not too severe. These are the conditions of so many of the favorite sections in Northern Italy, Hungary, Thibet, Utah, Colorado and New Mexico. To a certain extent this holds true of forests, preserving the same protection from winds; by their

devastation, dust, drought, frost, wind find easy access and impoverish the climate.

The greatest attention should be given to drainage and the removal of all sewage, for recent investigations have demonstrated that the bacteria of consumption, like those of the malarial diseases, are especially numerous upon and within the ground, and that bad drainage and sewage are important factors in the production of the disease.

In answer to the oft-repeated and agonized question, Can consumption be cured? We answer—unless very far advanced, most positively yes—and advance the great numbers cured by a sojourn in the salubrious ~~states~~ of our country to substantiate the assertion. Most drugs give only transitory help, if any. The only agents of value are those which develop oxygen and subdue fever.—*The Medical Times*.

#### On the Resolving Effects of the Medicated Galvanic Current on Various Growths.

By M. O. TERRY, M. D., Utica, N. Y.

Since views have so greatly changed during the past few years regarding various glandular enlargements, instead of their being considered scrofulous, or something equally obscure, concentrated or hereditary taint of peculiarity, it is now pretty well agreed upon that most of them are tubercular in character.

I am not prepared to state which is the more presumptuous, an attempt to remove the concentrated disease by surgical procedure, by which it can readily be seen, only that manifested can be in any degree eradicated, or whether by other methods such as the giving of remedies, which have a specific action on the glandular system and at the same time are directed towards the cause, with the ulterior motive of removing it. The first has simply to do with what is offensive to the eye and disagreeable to the patient. The latter theoretically appeals more to our humane intent of effectually disposing of the condition for all time in those under treatment.

I shall touch upon neither the one or the other, but confine myself to the catalytic action of drugs by the galvanic current. It is many years since I began my observations in reference to this treatment, which embraces cases of enlargement of the cervical glands, fibroids and subinvolution of the uterus.

It is expected surgeons will be skeptical, but when glands melt away, as it were, under this effective plan, which they will surely do

in most instances, if the surgeon or electrician will exercise a fair amount of patience, he will be rewarded by success and will experience no little degree of satisfaction in the non-surgical procedure by which nodular formations are removed without the unsightly cicatrices following other methods.

This is not a clinical report, but rather an article illustrating methods for using a medicated current. In the case of a young woman of eighteen, of delicate organization, fair skin, dark hair, and of slight build, who came under my care while attending school here from a distant city, I can best impress the reader with what can be done. There were twenty-eight cervical enlargements located latterly and posteriorly on the neck. She was under my care for three months. Only three small enlargements remained on her return home, much to the surprise of her physician, who was a prominent surgeon. If cases come for treatment when suppuration is in evidence, such condition must be treated in the regular way, but any other enlargements may be at once placed under the solvent medicated galvanic current. In applying the treatment for cervical enlargements the positive pole is placed posteriorly and the negative on either side, or if a long narrow sponge be had it may be placed anteriorly, covering the sides over the enlargements. To a pint of warm water add thirty drops of iodine and one ounce of muriate of ammonia, into which place the sponge electrodes. The strength of the current will depend upon the susceptibility of the patient. From twenty to forty milliamperes, or a comfortable sensation of warmth or burning will be quite sufficiently accurate. The duration of treatment should be from ten to fifteen minutes, and the repetition every five days until marked improvement be observed, then at intervals of seven to fourteen days, continued for months. To the surgeon who desires rapid results this treatment should not be considered for one moment. To him who considers how sensitive is the feminine mind in regard to cosmetic conditions, it will be looked upon as the desideratum above all other methods of cure.

The pathological process from which a large number of women suffer, viz., subinvolution of the uterus, following pregnancy, is one quite within the scope of this method of cure. It includes cases following puerperal fever and those not cured by trachelorrhaphy. Or it may be a morbid process set up about the climateric period, which is accompanied by persistent irregular or constant hemorrhages. The uterus may be from four to nine



inches in length. The medicated current is to be used in the following manner: For hemorrhage the copper electrode is placed in the uterus attached to the positive pole. The negative—a large-sized sponge—over the abdomen. The electrode should be covered by a piece of tubing if exposed in the vagina, and the preliminary purification should be as carefully done as regards sterilization as instruments for an operation. Careful attention should be given the hands as well.

The strength of the current may be from fifty milliamperes to 1,000. The patient is quite able to state the strength of current she can endure. It can be increased and diminished during the treatment of fifteen minutes. As the positive pole is acid and therefore caustic this is the pole for hemorrhages. If the aim is in the reduction of the uterus the positive pole should be placed on the outside, for by this procedure the remedies are not only propelled through into the uterus, but the resolving effects of the negative pole, together with the remedies, are thus brought about. Again, hemorrhages having ceased in connection with an enlarged uterus, it is well to change the poles during the treatment, using the negative in the beginning internally, ending with the positive, thus giving seven and a half minutes for each changed pole.

The treatment should be given at intervals of five days, unless hemorrhages are troublesome, when they can be given for two or three days in succession. Ordinarily the best time for treatment is five days before, and the same number of days after menstruation, in order not to interfere with that function. As improvement ensues the intervals may be increased to two and four weeks, continued for one or two years.

Hemorrhages are usually relieved in from three to six treatments and the reduction in size slowly. It has been my experience to reduce a uterus of nine inches to four, and one of six to three and one-fourth.

I do not pretend to have given any startling information of something new, but have simply given my personal observation extended over many years in a line of work not recognized as much as it should be, on account, perhaps, of the trouble incident to keeping batteries in shape and the time necessary for the accomplishment of the slow results obtained.—*The Medical Times*.

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Mary had a little lamb

The lamb it grew and grew;  
It followed her to market once  
And wound up in the stew.

—*New Orleans Times-Democrat*.

### The Medico-Legal Expert's Place.

At the present time there is no element of legal procedure that is in such deep discredit, with not only the general public, but lawyers and medical men as well, as expert medical evidence. This is just as it should not be, for there was never a time when there was more widespread realization of the necessity for medical expert knowledge to guide justice in the solution of the knotty problems that many forms of mental disturbance and their relation to criminality present. At the last annual meeting of the Medical Society of the State of New York, held in Albany a few weeks ago, the details of a case were presented that illustrate very forcibly how surely justice would miscarry if left without medical advice under certain circumstances.

The patient, a young man of good habits and rather amiable disposition, became moody and irritable as the result of worry and the possible remote consequence of foolishly severe initiation tests for an academic secret society. Though without any good reason, he became especially uncongenial toward his sister, with whom, for the time, he was boarding. One evening after a late supper, at which he grumbled much, he went to his room, obtained a revolver, and deliberately shot at this sister. He fortunately missed her, and, being followed as he fled from the house, was pursued across fields, and when finally overtaken had sunk down in an unconscious state. Next morning, when he came to himself, he remembered nothing of the occurrences of the evening before. Later he attempted suicide while treating a potato field with paris green. After this he entreated that he should not be left alone for fear he would do himself or others serious injury. Only at this stage of the case was it deemed advisable to consult a physician.

The young man was treated by the usual therapeutic methods employed in epilepsy. He was taken away from distasteful farm work, and a position on a coasting vessel obtained for him. He has gained in weight, has had no more attacks, has lost his irritability and regained his confidence in his self-control. The young man himself still assures his medical attendant that he has no recollection of the circumstances of his attempted homicide or suicide. His family have always remained firm in the belief that his actions on these occasions, while apparently deliberate, were really involuntary, and to a certain extent at least performed in a state of unconsciousness. In a word, this



case presents a typical picture of mental disturbance, rendering the patient irresponsible, yet having all the appearances of rationality that would surely lead to a decision that he must take the consequences of his acts. It is almost needless to say that, if the attempt at murder had been successful, any endeavor to set up a plea of insanity as a defense would have been generally considered as a medical makeshift to save a criminal. Subsequent developments make it clear, however, that this line of defense would be not only justifiable, but absolutely demanded in the interests of simple justice.

These cases of psychic epilepsy, as they are called, in which the usual convulsive movements of an ordinary epileptic attack are replaced by actions seemingly done with full accord of the will, but really under the stress of a more or less unconscious mental seizure, are not unfamiliar to specialists in nervous and mental diseases. Ambulatory epilepsy, in which the patient wanders from home, forgetting all about his former life and begins life anew, yet without arousing suspicion of his complete sanity in those with whom he comes in contact, is an extreme example of this form of epileptic seizure that has become familiar to the general public in recent years because of the exploitation of the cases every now and then in the public press. After recovery the loss of memory for acts done in the newly assumed personality is often as complete as the forgetfulness of the former life when the secondary personality is dominant. The question of responsibility in these cases becomes a most difficult problem, that can only be solved by careful scrutiny of the previous health and family history of the individual and his mental and physical peculiarities.

For such cases what is needed, if justice is to be fostered, is not the jarring evidence of interested experts, but the calm judgment of an experienced observer, who is given the data and the opportunity for personal examination of the patient. An expert in mental diseases of known reputation and conscientiousness, who as *amicus curiæ*—the friendly adviser of the court—would point out the limits of responsibility in given cases, would be a welcome institution. Our present system of rival experts, chosen and paid by each side is a disgrace, and has degenerated into a wanton abuse of scientific technicalities to defeat justice. In Germany we believe the medico-legal expert is a court official with a regular salary, whose opinion is asked on all doubtful questions of men-

talities beyond the evident limits of the law and the facts.

Only in quite recent years the realization has come that human responsibility is not a generic quality, but an eminently individual property. The recognition of its limitations includes the most serious problems with which the psychologist and psychiatrist have to do. The antiquated maxim of law that a knowledge of right and wrong is the criterion in such cases, is happily passing into a desuetude that is too positively humane to be called merely innocuous. We are coming to appreciate that it is not the crime, but the criminal, that must be punished. Human individuals are at least as different in their responsibilities for actions done as they are in the features that make them recognizable from their fellows. What is crime in one man is in another no more than a lamentable manifestation of perverted will-power. When the will-perversion is due to pathological causes and not to malice, the trial of the pervert becomes a matter for the physician rather than the judge. The medical attendant must, as far as possible, hold the position of adjudicator, and not that of either prosecutor or advocate, or science will serve to cloud, not clarify, the question at issue.—*The Independent*.

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#### The Judge as a Medical Expert.

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Great obsequiousness is paid by physicians to the opinions of judges on medical topics. Both the judges and their sycophants ignore the fact that the judicial function is not to make law, but to interpret it. Under the English common law, scientific matters must be proven by the ordinary laws of evidence; not laid down as dicta by judges generally destitute of scientific training and who go beyond their province in settling matters by an infallible dictum. The besetting sin of judges, as has been well remarked by great constitutional lawyers like Macaulay, is the tendency to make law in place of stating what the law is.

Judges and lawyers too often have the same proclivity for mysticism as clergymen have, and with less excuse. The judicial mind is supposed to obey the laws of evidence. Judging from the endorsement given fetichism like Christian Science, Dowieism, patent medicines and advertising quacks by judges, the judicial mind is rare upon the bench. Nowhere is this absence of judicial qualities more evident in judges than in their dealings with medical practice acts, with the

payment of experts, and with expert testimony itself.

That physicians should be ignorant of the rules of evidence and should fail to see that the great difficulty in expert testimony is that hearsay evidence cannot be admitted, and that most of the data obtained from a patient are (as has been decided in a rather contradictory Supreme Court decision) subjective and hence of the nature of hearsay evidence, is not surprising. Criticism therefore of expert testimony for the deficiencies which the law creates in it is hence wildly absurd. The law creates for the purpose of avoiding this difficulty a hypothetical case. The ideal method is where one hypothetical case is prepared for one side and the other by the opposing party and both hypotheses are submitted to the expert. Here two contradictory opinions could be rendered by an expert with perfect honesty, since he is not responsible for the validity of the allegations on which the questions are based. This is the true method of presenting expert testimony in scientific fashion. The expert, however, is criticized most for his candor. The allegation of venality is too often mendaciously made. The experts for the defense in the Guiteau case were criticized for venality, yet not one received a dollar for expert services, but all testified practically under attachment. The experts first called for the state in the Prendergast matter unanimously found the accused insane and therefore did not receive a dollar for their services. In the case of *The People vs. Luetgert*, the Cook County Board appropriated money to pay the experts in proportion to the services rendered by them to the state. Venality here would lie against the state, not against the defense. This is the rule in criminal cases. The expert, like the lawyer, frequently renders gratuitous service in the case of friendless defendants. On the other hand, the expert fund of the state is generally looted for callow graduates with a pull.

The judge, therefore, who flings broadcast accusations against medical witnesses ignores facts well known to the better class of jurists. Another great error in the judicial bearing of judges toward medical questions arises from the prehistoric medical lore from which so many judges start as a fixed standpoint. Mere party nomination to a judgeship does not constitute the nominee infallible on scientific topics. This, however, is ignored by many judges, who believe that personal experience entitles them to speak with absolute authority on all science. This was

well illustrated by Dr. William Darling, in a discussion before the New York Society of Medical Jurisprudence some two decades ago (*American Journal of Neurology and Psychiatry*, p. 291, Vol. II). A servant girl charged the son of the family in which she was employed with getting her with child. Dr. Darling confined the woman. The question was whether the child was at full term or not, since, unless at full term, the young man was not responsible. When Dr. Darling was called and the question of gestation arose, the judge said: "Did you ever see a seven-months' child?" "No," replied Dr. Darling. "Well I have," said the judge. "How did you know it was a seven-months' child?" asked Darling. "Why, the mother told me so," replied the judge. Darling turned to him and said, "Why didn't you ask the mother in this case and save me the trouble of coming here?" Here the physician was guided by common law presumptions of innocence and requirements of evidence which the judge in his omniscient infallibility ignored completely. The truth is that medical infallibilities of the type which has learnt nothing and forgotten a great deal and the judicial infallibilities join in decrying expert evidence from the standpoint of evolutions from their inner consciousness and not from the standpoints of science and law.

The official expert has proved such a gigantic failure in France and Germany (as witness the Dreyfus and other cases) that scientists like Virchow are urging a system closely resembling that of the English common law. The sooner physicians recognize that the judge is much more liable to err than their medical brethren, and that medical expert disagreement "is a harmonic symphony compared to judicial disagreement," the sooner will the evils of the expert system be removed and the sooner will physicians secure proper pecuniary remuneration for expert services.—*The Medical News*.

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#### Christian Science Obstetrics.

H. M. Hart, D. D., Dean of John's Cathedral, Denver, Colorado, in his book, "A Way that Seemeth Right," says on this subject: "Considering that the discoverer of this beneficent revelation (Christian Science) is a woman, and that by far the greater number of its devotees are women, it would be strange, indeed, if that great trial of womanhood, childbirth, were not to be dealt with. On page 77, in 'Science and Health,' Mrs.

Eddy relates a painless labor she presided over in Lynn, Mass., in 1874, and then, *mirabile dictu*, this great and pressing subject is barely mentioned. In the index, indeed, there is not a little reference under 'Childbirth,' 'Obstetrics,' and 'Parturition,' but most of the page references are the same, and the total result is sadly disappointing. The desire of an expectant mother is to avoid pain, and here are all the crumbs of comfort, the high priestess of a cult whose chief profession is to banish pain, herself vouchsafes to her eager listeners. On page 447, under the head of 'Obstetrics,' we have: 'Teacher and students should also be familiar with the obstetrics taught by the science.'

"With this brave heading we may well imagine many an anxious woman took heart, and with joyous expectation read on, only to find, after yearning for bread, Mrs. Eddy offers a stone.

"To attend properly the birth of the new child, or the Divine idea, you should so detach mortal thought from its material conceptions, that the birth will be natural and safe.'

"Then follows some very cautious and mysterious language. Mrs. Eddy takes great care not to promise painlessness in the process, and she is much too adroit to submit the truth of her theories to an experimental test, such as must often and inevitably occur to 'Christian Science' women. She, therefore, lets one of them state a single experience of more than twenty years ago, she herself avoiding any assertion. Surely, during the time her book has been multiplying to one hundred and five editions, thousands have had the opportunity to learn how their theories stood the test of that great trial. By this time the evidence must have become such an accumulated mass as to triumphantly declare the truth of the 'Christian Science' theories, if there is any truth whatever in them. But where is it? There is none! or it would have been only too eagerly forth-coming. Mrs. Eddy, in a late edition of her book, evidently is dissatisfied with the testimony of the mothers; her expectations are in the future; this she states in a sentence of curious indefiniteness. If a charlatan, convicted hopelessly of fraud, wants to study a mode of verbiage under which to cover his retreat, I commend him to this clever passage. It is a continuation of what I have just quoted.

"Through gathering new energies, an idea should injure none of its useful surroundings

in the travail of spiritual birth. It should not have within it a single element of error, and should remove properly whatever is offensive. Then would the new idea, conceived and born of Truth and Love, be clad in white garments. Its beginning will be meek, its growth sturdy, and its maturity undecaying. When this new birth takes place, the Christian Science infant is born of the Spirit, and can cause the mother no more suffering. Thus it will always be when Truth is allowed to fulfill her perfect work!'

"This is the only utterance of the oracle in response to the most imperative demand of womanhood; here is the one case of all others where the 'Christian Science' theory might be expected to be worth something; and what is it? A passage of such clever non-committal as the priests of Delphi themselves might well envy!

"Oh! ye disappointed mothers, will not your sufferings teach you to estimate the worth of this delusion, and discard a teaching so utterly at variance with your experiences?

"Occasionally the will may reduce the pain; but these theories are not essential to mental determination, and occasionally nature is so sympathetic that the ordeal is passed with scarce inconvenience. The other day in this neighborhood, a doctor left a woman a happy mother at two o'clock in the morning. He returned at nine to see if all was right. He took his breakfast at the restaurant which she and her husband kept, and he found that his patient had fried the oysters!

"The practice of every medical man will furnish similar instances; and if a votary of Christian Science is so spared as to have a painless delivery, then it was a combination of circumstances which favored her, and she owed nothing whatever to Mrs. Eddy or her teachings."—*Suggestion*.

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#### An Improved Method for Introduction of the Stomach Tube.

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Crenshaw contributes the following advice to the *Medical Record* of December 21, 1901:

Heretofore there has ever been the serious objection of nausea and much discomfort on the part of the patient to the use of the stomach tube. In the case of neurasthenia and hysterical individuals introduction of the tube is frequently impossible. If, however, the patient can be got to submit to a few

introductions of the instrument, a tolerance is usually established, and the unpleasant accompaniments of this valuable diagnostic and therapeutic procedure disappear, at least to a considerable extent. But how to palliate these initiatory steps safely and effectively is the heretofore unsolved problem.

Cocainization of the fauces and pharynx has been resorted to by some, but is now pretty generally abandoned as dangerous and ineffective. The peculiar susceptibility of some persons to the drug, which must be applied in considerable amount in order to produce any result, has led most of those who have had large experience with the tube to give up the use of cocaine altogether.

But an effective and entirely safe method of preventing nausea occasioned by the stomach tube is that of freezing two or three inches of the extremity of the tube just prior to its introduction, the object being to secure slight temporary anesthesia of the fauces and pharynx by means of the cold rubber. In this way cold is applied exactly where anesthesia is needed, and the irritability is overcome. Thus the tube may be introduced for the first time with practically no gagging, straining, or nausea. The well known anti-emetic procedure of swallowing ice offers a parallel illustration of the principle involved in the above method.

The extremity of the tube may be frozen by a few moments' spraying with ethyl chloride. The tube, of course, may be chilled in other ways, but the ethyl chloride is convenient and efficient. The tube has been found not to stiffen markedly under the influence of extreme cold, so no violence from the frozen rubber can occur. And by the time the tube reaches the cardia, its low temperature is sufficiently overcome to prevent any danger to the gastric mucosa, though the tube may remain in the stomach some time.

It is not advised that the cold tube be used longer in any one case than is sufficient to accustom the patient to the use of the stomach tube, though there are stomachs so irritable that the introduction of the tube as ordinarily practiced is never comfortable, when the cold tube is indicated for continued use.

The writer has made frequent successful tests of the principle herein set forth. Modifications, such as the use of an ice plug inserted in the end of the tube, have been tried, but the freezing of the extremity of the tube itself has proven most satisfactory.

—*The Therapeutic Gazette.*

#### Gen. Wood's Expenses.

The attempt that has been made in Congress to make political capital out of the alleged extravagance of Gen. Wood during the time that he was military administrator of the island of Cuba strikes us as a contemptible piece of business. Three years ago our relations with Cuba were in an exceedingly critical condition. It would have been easily possible, if great tact and good judgment had not been shown by the one in administrative control, to have brought the Cubans into actively hostile relations with us. Our war in the Philippine Islands, with the scores of millions of dollars of expenditure which it has involved, has been largely the outcome of the stupidity and misjudgment of those who were locally representing the United States government, and, as we said above, it would have been easily possible to have had a similar experience in Cuba, which, if it had come about, would have been a cause for national humiliation, and would have led to expenditures by the side of which all of the outgoes of Gen. Wood during his years of administration would have been but as the dust in the balance.

As both military and political administrator of the island of Cuba, it was necessary for Gen. Wood, in his official capacity, to entertain a great many people, not only those coming from the United States, but representatives of all classes of the people resident on the island. It seems to us that he performed this duty in an exceedingly economical manner. If he had been the representative of one of the great governments of Europe engaged in a similar service, his allowances would have been quite double what our war department saw fit to accord him. In matters of this kind, one has to judge the value of services performed by the results obtained, and the pacification and reorganization of Cuba under Gen. Wood's administration have been the most striking successes connected with our war with Spain.

We have succeeded, in this respect, in measurably carrying out the pledges which we made when, four years ago, we entered upon this war, and this in the face of a strong belief throughout this country that these pledges would never be kept; we have shown the Cubans that it is possible, under an efficient administration, to greatly improve their social, educational and sanitary conditions; we have so far held in check and neutralized the ambitions of Cuban leaders and the hostile feelings entertained by the

native Cubans against the Spanish residents that it has been possible to establish an independent government on the island, with reasonable assurance, if industrial difficulties do not intervene, of its permanent continuance; and all these successes have been, in a large degree, due to the great administrative ability of Gen. Wood, an ability which we risk little in saying would readily secure for him from some of the great financial syndicates the payment of an annual salary two or three times larger than that which the American people pay to the President of the United States.

To requite services of this kind by a Congressional demand that an investigation should be made for the purpose of determining how much champagne Gen. Wood purchased to give to the guests that he entertained at his headquarters at Havana is to exhibit, in one of its worst phases, that spigot economy and bung-hole waste which is too often characteristic of American administration. If Gen. Wood had been kept down to his army pay, had not been given a dollar of allowance for the purpose of entertainment, had not been able, by socially meeting with scores upon scores of the Cuban leaders, to win their confidence and secure their co-operation, and if, as the outcome of these cramped conditions, he had involved, as one of his army associates in the Philippines did, our country in war with the former Spanish colonists, these present critics of his would have no censure to bestow because of his then faults of omission. Under such circumstances he would have been an economical administrator who had succeeded in involving his government in an expenditure of a great many millions of dollars, and of making it, through its unkept pledges, and object of worldwide derision. True economy consists in the attainment of great results with the least waste or expenditure, and, judging by results, we think all sensible Americans must admit that Gen. Wood has shown himself to be an economist of the very first order.—*The Boston Herald.*

#### Bill Nye's Experience in a Hospital.

I have just been sent to the hospital for twenty days. My physician did it. He did it with an analysis. Anybody who amounts to anything nowadays gets analyzed. I like it here very much.

Sunday, 3 P. M.—An analysis today shows more casts, fibrin, gelatin and some zinc and copper. The chemist also discovers that in

1858 I fell from an apple tree and tore my panties in two places.

Monday, 4 P. M.—Temperature two-fifths of one degree above normal. Pulse regular, but sluggish. Have got all my business arranged, even to terms for shipment home.

Another chemical and microscopical analysis made yesterday of sputum, showing traces of nicotine and other poisons. Adieu, kind friends, I'm going home. A sweet young novice, who is training for a nurse, took my pulse this A. M. Took quite a while to find it, but I did not murmur or repine. I am trying to learn to love everybody, for to that bourne to which my chemist says I am going I should carry with me no emetics, no anisomites.

The life here at the hospital is delightful, and while I am fading away it is a joy to have loving hands bathing my little footies and manicuring my knobby brow.

Good-bye, wicked world! After December you will have to pay your own taxes, so the chemist says, for traces of one lung, also floating island and ice cream, were found in this last analysis. Do not mourn for me, kind friends, and choke and sob and make yourselves sick. It will be vain. Just live as I have done, so that you may come where I am at. Live upright lives and run the lawn mower about every ten days over my humble grave during the summer. That is all you can do. Weep not. In me you have lost a man who can never be replaced, but never mind—the world will have to drag on somehow. I couldn't be here all the time. Anybody with a particle of sense could have seen that I couldn't live forever.

P. S.—While penning the above words a messenger boy has come swiftly in with a note from the chemist. He says in his note: "We regret that an error was made in your case by our assistant, who, in the rush of business here at the college, has got your analysis somewhat confused with that of the justly celebrated horse, Nancy Hanks. We unfortunately got the sputa mixed. On going over your case again we find that, whereas, there are signs of glanders in the Hanks analysis, you are, as a matter of fact, almost too healthy."

So today I leave my kind little nurses in their neat attire. Good-bye, girls, I'm going home where they know me. No one there will count my fevered pulse in the still watches of the night. No one there will put a nice hotwater bag, that feels like a Mexican hairless dog, at my feet.

Seriously, what a blessing it is, when we are weary of work and the gastric functions

go on a sympathetic strike and the solar plexus goes away and sits down on a stone pile to weep over the situation, that one can go to one of these cosy corners, out of the current of whoop and hurrah, and eat raw steak and be sort of made much of.—*Exchange*.

### There are Other Cities, Too.

Every medical man will doubtless agree with the sentiment expressed in the following criticism by Charles Austin Bates, which we clip from *Current Advertising*. "We have been accustomed to looking upon the city of Boston not only as the home of piety and propriety, but as the dwelling place of nice men full of virtue, vim, vigor and virility.

"For this reason it comes somewhat as a shock to find the better part of a page in a recent issue of the *Boston Post* given up to advertisements of doctors whose specialty it is to make men what they really ought to be.

"The old Dr. Hallock Institute takes up nearly a quarter of a page; a generous double-column space is occupied by Dr. Lougest and Dr. Heigham occupies another big double-column space. Both of these seem to suffer under the disability of not being old, but this is more than counterbalanced by the announcement of old Dr. Bailey, old Dr. Dupree, old Dr. Thumim and many others, who, while not using large spaces, figure very prominently in the also rans.

"Judging from their advertisements all these doctors are wonders in their way, and one contemplates with a feeling of much depression the deplorable state of affairs which must exist in Boston.

"There can't be much of anybody there who is good for anything in particular, and the only people to be congratulated are the newspaper people who find this sort of advertising suitable for their columns.

"By the way, scattered in among this mass of stuff there are to be found one or two lady physicians who are looking for somewhat similar business among the fair sex, and the wonder is how they find enough of it to make a living."

**THE REFORMATION OF YOUNG CRIMINALS** at the New York State Reformatory at Elmira, as shown in the 1901 report, must inspire penologists with encouragement, and justifies those who have labored to revolutionize the old methods of treatment. On September 30, 1901, the population of the reformatory was 1,276, and the average cost of

maintenance was .419 cents a day. Of this total number 559 have been previously imprisoned. In 25 years 7,010 men have been paroled from the institution, and the greater number of these are today living good lives as private citizens. Had the definite sentence and punishment, instead of reform and education, been the rule, there can be little doubt that a very different result would exist. Each one has gone out better educated than when he entered and fairly skilled in a mechanical trade. The report wisely emphasizes that wisdom, economy, and true religion are all illustrated by the plan of kindness, justice, and reform. Two years ago the inmates were in a condition of chronic nervous excitement and unrest, mingled with apprehension and fear. "A criminal population knows by wireless telegraphy every occurrence within the walls, and waves of indignation or of sympathy reach every one simultaneously." Today, secret punishments, etc., being abrogated, the reverse is the case. Quoting the words of an observer the report says:

"If the expression upon the faces of men means anything, then I confidently affirm that a beneficent improvement has taken place at Elmira. The young men there—from 16 to 30 years of age—no longer have the dogged look that in the past seemed to express their loss of hope and the haunting of fear. Every inmate now there, by good conduct, may see his way to deliverance. And in returning to the outside world most of the young men take with them the helpful qualifications of a knowledge to read and write and the acquisition of one of the forty trades taught and daily practiced in the institution."

The necessity for the medical examination of criminals on trial and before sentencing them is clearly brought out in the report of the Elmira Reformatory. It would seem a plain dictate of common, and also of legal and medical sense, that if the source of criminality is disease or mental alienation, the commitment and treatment of the criminal should be very different from what it must be when vicious intent is the dominating factor. In the 1900 report there were 78 insane transferred, but owing to measures recommended and adopted to prevent this there were but 17 in 1901. A medical examination would have shown the heredity, the epilepsy or the insanity which brought these young men to Elmira. Five of the 1901 transfers had already been in insane hospitals, one was an imbecile, one a morphin habitue and one "physically abnormal." A more careful classification would have saved the



injustice and the needless trouble and expense.

The following is a part of a resolution which was adopted at the last meeting of the Congress of Criminal Anthropology, recently held in the city of Amsterdam, Holland; it should be followed in the rules of procedure in all of our criminal courts:

"1. Every child who has committed a crime should be examined by a competent physician, before being summoned into court, and those discovered to be actual degenerates should be placed in pedagogic establishments organized for the purpose of training and improving them intellectually and morally. 2. The biologic record of the criminal should be appended to the court record in every criminal case. 3. Government should take effective steps to arrest the progress of alcoholism."—*American Medicine*.

#### A Powerful Diuretic.

Although the materia medica abounds in drugs having a diuretic action, but few of them can be considered pure diuretics, the majority producing their effect in an indirect manner. Among the pure diuretics, theobromine has been extensively employed in late years in the form of the salicylate. This preparation, however, is not free from irritating effect upon the gastro-intestinal tract owing to the contained salicylic acid, and for this reason Dr. Impens, of Brussels, after considerable experimentation, succeeded in producing a double salt or theobromine sodium and acetate of sodium, to which the name agurin has been given. This preparation has been made the subject of extensive clinical studies in the clinics of Professors von Litten, of Berlin, Destree, of Brussels, Buchwald, of Breslau, and von Ziemssen, of Munich. The results of these tests have shown that in the dropsy of cardiac disease, agurin is a prompt and reliable diuretic free from any irritating effects upon the digestive organs or kidneys, while in some cases of ascites, due to cirrhosis of the liver, and in cases of edema from chronic interstitial nephritis, without marked destruction of the renal epithelium, the drug acted efficiently. The diuretic value of agurin is further confirmed by some conclusions presented by Dr. A. C. Barnes (*Medical Record*, May 24, 1902) in a discussion before the American Therapeutic Society, according to which the acetates form double salts with theobromine, which are soluble and are powerful diuretics, of which agurin is a type.

#### The Kyger Resolutions for the Abolition of the Newspaper Publication of Personal Medical Advertisements.

In a paper read by Dr. J. W. Kyger before the Kansas City Academy of Medicine on "The Decadence of the American Race," it was deemed of sufficient importance to appoint a committee to draft resolutions expressing the feeling of the regular medical profession in regard to the abatement of one of the causes of this condition, and also asking for the co-operation of the profession throughout the United States.

WHEREAS, it can and has been shown, by ample statistics, that the American race is rapidly decreasing in its birth rate, thereby threatening ultimate and complete decadence of the race, and

WHEREAS, such decadence has become so apparent that it should claim the serious attention of those of influence and power to in any degree lessen this evil, and

WHEREAS, without a special effort to investigate, it must have been observed by the most indifferent with what flagrant violation of all sense of delicacy the public press gives place to advertisements of nostrums and means intended to prevent or cut short pregnancy; these advertisements appearing in a column of the paper set apart for such purpose under the name of "PERSONAL MEDICAL ADVERTISEMENTS," and referred to as "Guarantees," "Sure Relief," "Sure Prevention," etc., occupying in some Sunday editions of reputable papers as much as two columns destined to fall into the hands of all classes, and

WHEREAS, we recognize the press as a most potent factor in the education of the masses: be it

*Resolved*, by the Academy of Medicine of Kansas City, Mo., that we respectfully recommend that a censorship over the public press should be exercised to the end of correcting such practice of publishing advertisements as those referred to in our whereases. Be it further

*Resolved*, that it should be deemed of sufficient moment for the attention of the Post Office Department of the United States of America restricting or prohibiting the distribution of such papers, periodicals or magazines through the United States mail if they continue to so prostitute their columns with such matter. And be it further

*Resolved*, that a copy of these resolutions be sent every State Medical Association in



the United States urging their co-operation in this movement by the adoption of these resolutions.

*Resolved*, that we request the Secretary of every State Medical Association adopting these resolutions to forward two copies, one to the American Medical Association and the other to the Postmaster General, petitioning for relief from this destructive influence.

*Committee* { JOHN W. KYGER, M. D.,  
H. C. CROWELL, M. D.,  
B. H. ZWART, M. D.

#### League for the Suppression of Inoculable Diseases.

At a meeting held in the office of Dr. Shrader, Iowa City, Iowa, on April 12, 1902.

#### EVILS OF VENERY.

It was held that the consensus of opinion among medical men appears to be that measures should be devised to overcome the widespread evils of venery, which are so disastrous, not alone to the health and comfort of men and women, but of children, who are innocent victims of inoculable disorders.

#### CHILDREN ARE SUFFERERS.

From reports at medical association meetings, it is found that in large cities of the United States seventy-five per cent. of the men are more or less diseased, and that over fifty per cent. of married women become diseased from contact with their husbands. The number of children who suffer from such parentage is incalculable, and the evil effects follow through life.

How to prevent the spread of conditions as noted above, and how to curtail them in the future, has been a problem for the medical profession to solve, and their efforts to pass laws which would prevent the legitimate union of criminals or other degenerates, also of those who are victims of tuberculosis, gonorrhoea, syphilis, etc., have been unsuccessful.

#### HEALTH CERTIFICATE INEFFICIENT.

Physical examination of diseased persons and a certificate of health from a commission of medical examiners has been found impracticable. Laws of that character cannot be enforced. The Supreme Court of one state has declared such a law to be an infringement of personal and private rights, therefore unconstitutional.

#### EFFECTS OF IGNORANCE.

Further, we believe that emasculation—

which is favored by comparatively few—or sequestration of physical and mental degenerates is of doubtful utility. And a certificate of health, from the most able medical commission, would not insure freedom of the progeny from other and more deplorable effects of ignorance of those natural laws which govern reproduction, viz., criminals and mental degenerates, including sex perverts; they would be as plentiful in the future as at this time.

It is therefore obvious that some other means must be adopted, and the best plan to insure good citizenship is to teach parents how to beget good children. Every child has the right to be well-born; well-born in the sense of being of sound mind and body. The state has the right to demand this of parents; but the state, in making such a demand, has also a duty to perform, which is to educate coming parents properly. The state of Iowa spends many, very many dollars to teach how to breed good live stock, but not one cent is used to teach how to procreate good children.

#### DUTY OF THE STATE.

When it is considered that three thousand boys and girls become men and women in the United States every day in the year, how important it is that they should be educated regarding their ability for good or evil during parenthood.

It is therefore the opinion of the subscribers to this preamble, that an association composed of regular practitioners in the state of Iowa be formed, and all medical men in good standing be requested to become members and co-operate for the passage of measures herein proposed to bring about such reforms.

Signed by J. C. Shrader, M. D.; Elmer C. Clapp, M. D.; J. G. Mueller, M. D.; S. S. Lytle, M. D.; L. Clark Mighell, M. D.; C. J. Burge, M. D.; W. L. Biering, M. D.; C. M. Hobby, M. D.; J. P. Mullin, M. D.; J. B. Carder and others.

#### NAME OF THE ORGANIZATION.

The name of this association is The Iowa Society for the Suppression of Inoculable Diseases.

#### OBJECT OF LEAGUE.

Its object, the education of men and women regarding their marital duties; that through such an education they will be able to understand and see the many pitfalls which beset human beings, both in the single as well as in the marriage relation.

Such an education will teach them to avoid professional pretenders, whose aim is to

lure their hard earnings from them without giving any benefit in return. It will also prevent them from falling into the hands of charlatans and quacks.

Officers of The Iowa Society for the Suppression of Inoculable Diseases.

President, Dr. J. C. Shrader, Iowa City, late President State Board of Health; Vice President, Dr. E. C. Clapp, Iowa City; Secretary and Treasurer, Dr. J. G. Mueller, Iowa City; Traveling Representative, U. S. Bayer, author of "Modern Researches," "Maternal Impressions," also "Studies of Life."—*Iowa Medical Journal*.

### News and Abstracts.

The Maine Pharmaceutical Association will hold its thirty-fifth annual meeting at Portland, July 8, 9, 1902. An excellent and entertaining program has been prepared, and all druggists will be made welcome.

#### The Officers of the N. H. Medical Society.

At the recent meeting of the New Hampshire Medical Society officers for the ensuing year were elected as follows:

President, I. A. Watson, Concord.

Vice-President, Ezra Mitchell, Lancaster.

Treasurer, M. H. Felt, Hillsborough Bridge.

Secretary, Granville P. Conn, Concord.

Executive Committee, F. A. Stillings, Concord; George D. Towne, Manchester; W. T. Smith, Hanover; F. E. Kittredge, Nashua; Ira J. Prouty, Keene; A. C. Heffinger, Portsmouth; G. W. McGregor, Littleton.

Anniversary Chairman, S. M. Dinsmoor, Keene.

Committee of Arrangements, D. E. Sullivan, F. W. Grafton, N. W. McMurphy, S. G. Morrill, L. A. Sanders, Concord.

Necrologist, John J. Berry, Portsmouth.

Dr. E. Gard Edwards, of So. Norridge-wock, has sold his practice to Dr. H. W. Smith, Hampden Center, Me. Dr. Edwards goes to Colorado or New Mexico, owing to state of his wife's health.

*To the Editor of the Journal of Medicine and Science,*

Dear Sir:—The undersigned have been appointed by the Board of Managers of the Society of American Authors to solicit subscriptions for the erection of a suitable monu-

ment over the grave of Dr. Thomas Dunn English, editor, lawyer, soldier, physician, statesman, author and long-honored Vice-President of the Society of American Authors.

Gifts for this tribute to the illustrious author of "Ben Bolt" will be welcomed in any amount, large or small. The receipts will determine the character and stateliness of the monument. Names of the donors will be imperishably preserved on brass sheets in the monument. If, after the completion of the work, there should be any surplus funds, they will be turned over to the family of Dr. English.

Checks or money orders should be drawn in favor of Morris P. Ferris, treasurer, and should be addressed: "Thomas Dunn English Memorial, Society of American Authors, 32 Broadway, New York."

An itemized report of the receipt and distribution of all funds received by the committee will be mailed to all contributors.

MORRIS P. FERRIS,

EDWARD O. FLAGG,

G. GROSVENOR DAWE.

At the last meeting of the Kennebec County Medical Association the following officers were elected for the ensuing year:

President, F. E. Strout, M. D., Gardiner, Maine.

Vice-President, O. W. Turner, M. D., Augusta, Maine.

Secretary and Treasurer, W. Johnson, M. D., Augusta, Maine.

Standing Committee, W. P. Giddings, M. D., Gardiner, Maine; G. R. Campbell, M. D., Augusta, Maine; Chas. Mabry, M. D., N. Vassalboro, Maine.

**SUPRARENAL EXTRACT IN PNEUMONIA.**—It is now generally admitted that the internal administration of suprarenal extract increases the blood pressure, some believing that its effect depends upon constriction of the peripheral blood-vessels, while others contend that it directly stimulates the heart. E. A. Gray (*Med. Rec.*, Apr. 5, 1902), having observed the rapid work of this drug in stopping pulmonary hemorrhage, was led to use it in cases of senile pneumonia. He obtained such favorable results that he has been led to believe that the drug is a valuable heart stimulant, which may be advantageously employed in pneumonia where there is impending heart failure and impeded pulmonary circulation with co-existing renal inflammation. Increased peripheral blood-pressure does not seem permanent.—*The Medical News*.

# Phillips' Emulsion

50% best NORWAY COD LIVER OIL  
minutely sub-divided,  
WITH WHEAT PHOSPHATES (Phillips')

Pancreatized, Palatable, Permanent, Miscible in Water, Milk, Wine, etc.

# Phillips' Milk of Magnesia

Mg H<sub>2</sub> O<sub>2</sub> (FLUID.)

"THE PERFECT ANTACID."

for correcting Hyperacid conditions—local or systemic.  
Vehicle for Salicylates, Iodides, Balsams, etc.

# Phillips' Phospho-Muriate of Quinine, COMP.

TONIC AND RECONSTRUCTIVE.

WHEAT PHOSPHATES, WITH MURIATE OF QUININE AND STRYCHNINE.

PHILLIPS' WHEAT PHOSPHATES (ACID).

PHILLIPS' SYRUP OF WHEAT PHOSPHATES.

PHILLIPS' DIGESTIBLE COCOA.

THE CHAS. H. PHILLIPS CHEMICAL CO., NEW YORK.

## THE VARIETY OF FORMULAE.

THE possibilities at the command of a physician in the use of MELLIN'S FOOD for Modifying Fresh Milk in the Home are briefly shown below.

R	Mellin's Food	2	tablespoonfuls.
	Milk	12	fluidounces.
	Water	4	fluidounces.
		M	

The analysis of this mixture is

Fat	Proteids	Carbohydrates	Salts	Water
2.72	3.14	6.35	.68	87.11

With the same formula prescribe 1 tablespoonful of Mellin's Food instead of 2, and the analysis then is

Fat	Proteids	Carbohydrates	Salts	Water
3.16	2.85	5.44	.71	87.84

Many other formulæ and analyses are given in our Formula Booklet. It is free to physicians. We should like to send you one. You know the Food.

MELLIN'S FOOD COMPANY, BOSTON, MASSACHUSETTS

### —The Abuse of the Curette.

Dr. V. P. Valentine, Professor of Diseases of Women in the Dallas University, presents in the April issue of the *Texas News*, a most able and instructive article under the above caption. Among the many excellent suggestions he says: "Three very important pus-producing germs are frequently introduced into the genital tract; staphylococcus, streptococcus and gonococcus, of these the last being the least virulent and the first the one containing the greatest danger. As long as a simple sapræmia exists, that is, as long as putrefactive action is contained within an envelope and has not yet invaded the living cells, it may be possible to get it without breaking down the breastworks or fortifications which nature has thrown up. It is demonstrable that as soon as nature has any cause to fear an invasion by the foe, she calls out her standing army; the leucocytes begin preparing for war; they close up the fimbriated ends of the tubes, lymph is thrown out, plastic material is formed, and nature rallies all her forces to repel the invaders. Now we go in with the curette and tear away these fortifications, and the hordes of bacteria overrun nature with their countless millions, so that we have, instead of a mere intoxication, an invasion of living tissue, and every current of the body, both lymph and blood, running bank full of pus-producing micro-organisms with their toxins, and general sepsis is the result."

In these conditions he points out that medication is indicated to destroy the germs and not facilitate the migration of curetting. He also states "rather than curette in cases of doubt it is infinitely better to employ medication."

Experience and clinical investigation has demonstrated that, in cases of inflammation due to the presence of one or more of these pus-producing germs, Micajah's Medicated Uterine Wafers act most satisfactorily.

The pronounced antiseptic and bactericidal properties of this remedy should induce its use in cases where a curette might seem called for, and as a medication it meets all of the requirements as suggested in the conditions mentioned by Professor Valentine where a local application is indicated.

The Maltine Company have just issued a valuable card giving a list of poisons and their antidotes. They will gladly forward this card, suitable to be hung up in the office, to any physician making application for it.

### Gastralgia—Its Treatment.

Gastralgia is, for therapeutical purposes, divided into two groups by Professor Saundby (*N. Y. Medical Journal*). The first group comprises those cases in which pain occurs independently of eating, and the second group those cases in which the pain occurs after food is taken. The treatment of the first class consists of change of scene, a sea voyage or mountain air and abundant food at regular intervals. The palliative treatment consists of iron, quinine, arsenic, nux vomica and the mineral acids.

For the second class, the treatment is rest in bed, milk and lime water in sufficient quantities, say an ounce every hour. A nutrient enema of one egg, beaten up in four ounces of milk, to be given every four hours. The amount of milk should be increased with improvement, and if milk fails, from two to four ounces of lightly cooked minced meat may be substituted.

For the relief of the pain in both cases, Saundby gives morphia or heroin, but in a recent clinical report Professor Boone, College of Physicians and Surgeons, St. Louis, states that he finds one Antikamnia and Heroin Tablet (5 grains Antikamnia; 1-12th grain Heroin Hydrochloride), given as required, not only relieves the pain, but prevents its recurrence, much more satisfactorily than either heroin or morphine alone. In other respects he concurs with Professor Saundby in his method of treatment.

### Sanmetto in Genito-Urinary Troubles and in Diseases of the Mucous Membranes of a Chronic Character.

I do not generally endorse proprietary medicines, but Sanmetto is such an elegant combination that I must make an exception in its favor. I have used several bottles of it in my practice with the most gratifying and surprising results. I used it in a case of inflammation of neck of bladder. Have also used it in several other cases, and will say that I have never used any preparation which has given me such satisfactory results in genito-urinary diseases as does Sanmetto. I am afraid that the druggist, in one case, substituted the elixir of saw palmetto, which they have tried to have me use instead of Sanmetto, as it did not taste as it should, but I have tried so many preparations of saw palmetto with no beneficial results that I want the genuine Sanmetto or none.

H. G. PECK, M. D.

Racine, Wis.

THE BEST RESULTS ARE ASSURED IN BROMIDE TREATMENT WHEN YOU SPECIFY

# PEACOCK'S BROMIDES

AND THE GENUINE IS DISPENSED.



NEUROLOGISTS and General Practitioners prefer it because of its superior qualities over the commercial salts. . . Each fluid drachm represents fifteen grains of the combined chemically pure Bromides of Potassium, Sodium, Ammonium, Calcium and Lithium.

DOSE: ONE TO THREE TEASPOONFULS, ACCORDING TO THE AMOUNT OF BROMIDES REQUIRED.

# CHIONIA

From CHIONANTHUS VIRGINICA.

**R**E-ESTABLISHING portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.

Hepatic  
Stimulation.

Without  
Catharsis.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES A DAY.

FOR CLINICAL TRIAL WE WILL SEND FULL SIZE BOTTLE TO ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

**PEACOCK CHEMICAL CO.**  
ST. LOUIS, MO., U. S. A.

In **CARDIAC** and **GENERAL MUSCULAR RELAXATION**,  
due to **Functional Cardiac and Circulatory Disturbances**,

# CACTINA PILLETS

Has many Advantages over other Heart Stimulants.

IT HAS NO CUMULATIVE ACTION, AND  
IS ABSOLUTELY SAFE AND RELIABLE

EACH PILLET REPRESENTS ONE ONE-HUNDREDTH OF A GRAIN CACTINA, THE ACTIVE PROXIMATE PRINCIPLE OF CEREUS GRANDIFLORA

DOSE: ONE TO FOUR PILLETS THREE TIMES A DAY.

SAMPLES MAILED TO PHYSICIANS ONLY.

The **CHIEF** Characteristics of the Physiological Action of

# SENG

Is to promote Normal Digestion by encouraging the flow of Digestive Fluids.  
It is the Modern and Most Successful Treatment for  
**INDIGESTION.**

A PALATABLE PREPARATION OF PANAX SCHINSENG  
IN AN AROMATIC ESSENCE.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES A DAY.

A FULL SIZE BOTTLE, FOR TRIAL, TO PHYSICIANS WHO WILL PAY EXPRESS CHARGES.

**SULTAN DRUG CO., St. Louis, Mo., U. S. A.**

### The Promiscuous Bestowing of Degrees.

Dr. Daniel C. Gilman, president of the new Carnegie Institution at Washington, has been uttering some wise and strong words recently in condemnation of the promiscuous degree-giving practiced by many colleges in the United States, and his strictures under this head, we are pleased to observe, are supported by such well-known educators as Rev. Joseph H. Twitchell, of Hartford, and Dr. George S. Fullerton, professor of philosophy in the University of Pennsylvania. In an interview on this subject in the Philadelphia *Public Ledger*, Dr. Fullerton declared very justly that our system of dubbing men doctors of divinity on the score merely of their being persons of prominence, and without regard to their real intellectual attainments, was cheapening the whole system of degree-giving and rendering us ridiculous in the eyes of learned men in other lands. The worst abuse is the "throwing about" of the degree of doctor of divinity. "The popular clergyman," said Dr. Fullerton, "may be the least scholarly of men; yet, if he have friends of some influence, he can always get this degree. I know a number who enjoy this honor, and who are not even men of ordinary culture. They make no pretensions to being scholars." The case might be put much stronger than this and still be well within the truth. If a list of persons now strutting about the country with a long tail of initial letters trailing behind their names could be printed, together with their actual standing and intellectual attainments, the showing would be amusing enough for a comic almanac. We happen to know one such person who flourishes a D. D., but who cannot write three consecutive sentences correctly either as to spelling, grammar, or punctuation, and there are probably other instances of the same sort.—*Leslie's Weekly*.

John Milton Biglow, M. D., Professor of Therapeutics, Albany Medical College, Albany, N. Y., says: "I have used and prescribed Fellows' Hypophosphites during the past fifteen years frequently. This preparation has seemed to answer a better purpose in promoting constructive metamorphosis, and in arresting the progress of phthisical complaints, than any other with which I am acquainted."

EMINENTLY APPROPRIATE.—"The appropriate hymn is as far to seek as the right text," remarked a famous divine, "but occasionally it comes to hand without effort.

"A certain Presbyterian church once invited a preacher to address the Sunday School, who proved to be undeniably tedious. The children began playing, and the adults looked dismal.

"When the good man at last finished, there was the swish of drapery and the shifting of feet and a battery of coughs, which meant the sudden discharge of long pent-up impatience. Then an elder arose who saw that the general restlessness must be turned in some harmless direction.

"Accordingly, he shot quickly and at a venture. 'Let us all unite in singing hymn 571,' suggested he. The audience was evidently delighted with the elder's choice, for there was rare heartiness in rendering the old favorite, 'Hallelujah! 'Tis Done.'"  
—*New York Tribune*.

### "WORKED LIKE A CHARM."

LOS ANGELES, CAL., July 7, 1899.

Dr. John B. Daniel, Atlanta, Ga.

Dear Sir:—Have used your "Passiflora Incarnata" and would not be without it. In two cases of protracted insomnia and great nervous exhaustion the remedy worked like a charm.

Sincerely yours,

NESTOR A. YOUNG, M. D.

ECZEMA OF PALM.—This, as a rule, is due to occupation causing habitual immersion of the hands in water. Salicylic acid, ten to twenty grains to one-half ounce of ointment base, is the remedy *par excellence*. The hands should never be washed with water, but when it is desired to remove the ointment it should be done by means of olive oil or liquid petrolatum. Salicylic acid plaster, in strengths of five to ten or twenty per cent., as required, will overcome the objection to the use of ointment in this region.—*Philadelphia Polyclinic*.

### The Rigid Os.

We all know how very trying it is to the physician, to say nothing of the unfortunate patient, who, after hours of suffering from labor pains, finds herself tired and greatly exhausted, because of a rigid os.

This condition is so frequently encountered by all obstetricians, and, unless relieved, prolongs labor and depletes the vitality of the patient. In these cases H. Marion Sims, M. D., uses Hayden's Viburnum Compound with good success, and if this eminent practitioner so readily endorses H. V. C. we have no hesitancy in freely recommending its use in the above condition.

**A Product of the  
Highest Nutritive Value**

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**ARMOUR'S**

**Extract of  
Red Bone Marrow**

---

This preparation is rich in the elements that are necessary to the economy. Its administration increases the percentage of hemoglobin, causes the red corpuscles to multiply, enhances the oxygen carrying power of the blood and stimulates the appetite.

Physicians with cases of Anemia, Marasmus and other obstinate diseases, should try the Extract of Red Bone Marrow and note results.

One to four teaspoonfuls in cold plain or carbonated water, beer or with Nux Vomica, dilute Phosphoric Acid and Fowler's Solution.

**Armour & Company  
CHICAGO**



**Extract from "Remedial Measures Indicated in Affections Attended with Pain,"**

By G. S. Trotter, M. D.

In papine advanced pharmacy has given a perfect opium preparation. It possesses the anodyne virtues of opium and not the constipating and untoward actions. Papine may be briefly defined as the only opiate which is free from the evil effects which I have just named. It is very prompt, in this respect excelling any other opiate, and it never produces nausea, constipation and the usual woes that go hand in hand with the old-time opiates. Papine is, therefore, the remedy which is indicated in all forms of inflammatory pain. It is given in doses of one teaspoonful every one, two, or three hours, until its anodyne action is attained. In giving papine, we can bear in mind that a teaspoonful represents the strength of one-eighth of a grain of morphine. Having this fact in mind, the dosage which is appropriate in any case will at once suggest itself.—*New Albany Medical Herald.*

**HEART TONIC.**—I take pleasure in saying that I prescribed Cactina Pillets, and as heart tonic it is just splendid. I have used thousands of them in my practice, and shall continue to do so.

W. H. HAWLEY, M. D.

Penn Yan, N. Y.

The venerable Senator Pettus, of Alabama, remarks: "The secret of living long is to work. I am 81, and happy and healthy as a boy. I notice that all of my neighbors who got rich and retired are all dead. I never got rich, and I never retired. I tell you, young man, the most fatal disease I know of is to quit work. It kills every time. Keep working and you'll keep alive."

"A very excellent preparation. I have obtained very good results from its use in Nose and Throat Inflammations, Gastritis and Cystitis.

A lady consulted me some time ago for what, on examination, proved to be an aggravated case of acute cystitis.

Besides internal medication, I irrigated the bladder with boric acid solution, with no benefit whatever. I then tried a solution of Glyco-Thymoline (Kress). Two irrigations sufficed to effect complete cure. I also had a bad case of Proctitis, which, on applying Glyco-Thymoline (Kress), yielded very nicely."

G. W. HOPKINS, M. D.

No. 275 Prospect St., Cleveland, O.

**Sold Wrong Medicine; Fined \$50.**

Drug Store Manager Suffers for Giving Substitute to Customer.

In Special Sessions on last Thursday before Justices Wyatt, McKean and Hinsdale, Clarence D. Bowman, a director of the Lewis A. Bates Company and the manager of their drug store in No. 739 Sixth avenue, pleaded guilty to having violated section No. 364 of the Penal Code in using another preparation in place of essence of pepsin manufactured by Fairchild Brothers & Foster in filling prescriptions calling for the latter preparation. He was fined \$50.

It appeared that on several occasions when physicians had prescribed Fairchild's pepsin, Bowman had delivered the imitation mixture. Bowman said he was sorry for what he had done, but had no excuse to offer. In imposing sentence Justice Wyatt said that the offense was a most serious one, and that a heavier penalty would have been imposed had not the injured firm recommended leniency by reason of its being the defendant's first conviction.—*The New York Press*, May 24, 1902.

**IN RHINITIS AND HAY-FEVER.**—I am more than pleased with Chloretone Inhalant. I have used it with gratifying results in hay-fever and in the various forms of rhinitis.

J. W. McDANIEL, M. D.

Denver, Colo.

**ALCOHOL AS A DISINFECTANT.**—Alcohol in proper dilution is a very efficient disinfectant, its disinfecting properties depending partly upon its desiccating action and partly upon a distinct toxic influence upon the bacteria. In efficiency it may be classed between corrosive sublimate and carbolic acid. The best solution for the disinfection of the hands is slightly acidulated 80 per cent alcohol.—*Medical Times.*

**PANOPEPTON JELLY.**

One ounce fresh celery (cut in small pieces),  
One-half ( $\frac{1}{2}$ ) of a small box best gelatine,  
One-quarter teaspoonful salt,  
Two dashes pepper,  
Six tablespoonfuls Panopepton,  
Two cupfuls cold water.

Soak the gelatine in one-half cupful of cold water for one hour; put the water and celery in a double boiler on the fire and simmer one-half hour; add the salt, pepper and soaked gelatine and stir until it is dissolved; remove from fire, add Panopepton; stir, and strain through linen into a jelly-jar, and set near ice. Serve in small quantities.

# Be Interested,—

## for

# your Patient's Sake

Indifference toward the results of modern pharmacological progress is an injustice to yourself, Doctor, and therapeutic negligence is unfair to him who appeals to you for help. Be-

cause of continually receiving so much gratifying testimony from experienced and conscientious physicians, we feel it our duty to state more forcibly the superior qualities of our pre-digested (pancreatized) and palatable preparation of cod-liver oil known as HYDROLEINE. Sold by druggists generally.

***We invite you to test it and shall esteem your criticism a favor.***

THE CHARLES N. CRITTENTON CO.,

115 and 117 Fulton St., New York.

Sole Agents for the United States.

Samples sent to physicians free on application.

THE ALKALINITY OF BLOOD SERUM

# GLYCO-THYMOLINE

(KRESS)



K & O

Birmingham Nasal Douche.

## A PURGATIVE *For Mucous Membrane*

INDICATED IN ALL CATARRHAL CONDITIONS, ESPECIALLY

## NASAL CATARRH

"Glyco-Thymoline (Kress) is well adapted for the treatment of catarrhal conditions of the mucous membranes. I have frequently employed it with benefit in nasal, buccal and bronchial affections. Direct local medication is of much advantage in these cases. In some instances we may safely depend on topical measures alone; in those where internal treatment is also necessary, Glyco-Thymoline (Kress) proves an excellent adjuvant."

MEDICAL BULLETIN, Phila., Pa., March, 1899.

**SPECIAL OFFER**

A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges. K & O Douche to physicians, 15 cts.; \$1.50 per doz. Retail 25 cts. Remit stamps.

**KRESS & OWEN COMPANY, Chemists, 221 Fulton Street, New York**

**HASTENS RESOLUTION AND FOSTERS CELL GROWTH**

### A Frequent Oversight in Obtaining Surgical Antiseptics.

*To the Editor of American Medicine:*—During a recent trip it was my pleasure to visit some of the surgical clinics at several large hospitals where large classes of students were in attendance. Without exception, I observed at these clinics an oversight—or what appeared to me to be an oversight—in the antiseptic precaution taken. Although all the usual aseptic details were apparently well attended to, the floors, which may have had due attention some hours previously, were dirty, having been trodden on by many pairs of dirty street shoes. In one instance, just previous to an abdominal operation, an orderly hastily and somewhat vigorously swept up a portion of the floor with a large dry cloth, thereby sending into the air a considerable quantity of dust.

I think it can scarcely be questioned that infection of wounds may occur under such conditions. As nearly every important operation has in attendance several who are present only as guests or students, and many steps are taken on the floor, it seems reasonable that, unless the floor be dampened, there must be much germ-laden dust in the room, and this would be especially true at public clinics. In view of this, would it not be a good measure to keep an operating room floor wet with some antiseptic solution during operations?

H. VERNON WEAVER, M. D.,  
Providence, R. I.

—In *American Medicine*.

**A FEMALE BELLEROPHON.**—While making arrangements for the holding of the great Congress of Religions at Chicago, the Rev. Dr. John Henry Barrows, president of Oberlin College, had so much correspondence that he decided to employ a stenographer. According to the *Chicago Record-Herald* he did employ a pretty young lady, who afterward figured in an incident which that paper relates:

On the 14th of February, as the doctor was toiling away, his little son became much excited over the sending and receiving of valentines, and suddenly thinking of his father, he proposed that he and his mother send a valentine up to the third floor.

"Well," said Mrs. Barrows, "it is very nice of you to remember father. How would it do for me to write a valentine and let you take it up?"

The boy was delighted at the idea and his mother wrote upon a sheet of paper: —

"Please kiss the bearer."

This she placed in an envelope, which was

sealed and addressed to the doctor. The boy started upstairs, but he had been running around a good deal and his legs were weary. When he reached the second floor he met the very pretty stenographer, who had started out after postage stamps or something, and asked her if she wouldn't be kind enough to hand the note to his father.

She took the envelope, gave the child a pat on the cheek and ran back upstairs, where—perhaps prompted by feminine curiosity—she waited while Dr. Barrows opened his valentine and read, in his wife's handwriting: "Please kiss the bearer."

Here is where Dr. Barrows always cuts the story off.

**GASTRO-INTESTINAL CATARRH.**—I have given Chionia a thorough test on my own person, having been a sufferer with gastro-intestinal catarrh, torpidity of liver, and constipation. I have to say that I have been more than pleased, as I have been so largely benefited by its use.

L. J. BURTON, M. D.

Lake City, Fla.

**ULTIMATE RESULTS OF TENDON GRAFTING IN INFANTILE PARALYSIS.**—Sinclair White's experience, given in *The British Medical Journal*, in tendon grafting includes eleven cases. One of these had to do with the extensor muscles of the thumb, the others being cases of foot palsy. Although he thinks that the first case is almost a failure, a large part of the cases have received great benefit. As a general rule, it is better not to operate until the age of four years or later. The limb must always necessarily be to a certain extent weak. It takes time to develop the full benefit of the operation. He believes that his method is a valuable addition to surgery.—*The Medical Record*.

**SUBSTITUTE FOR A REAL STEAM-BATH.**—When the steam-bath is indicated in country practice it is easily and satisfactorily given by boiling a dozen or more ears of corn, taking them from the water while boiling, wrapping in cloths moistened in hot water, and packing them as close to the patient as possible. Keep him closely covered, and a few moments will bring the most profuse perspiration you ever saw.—*Ex.*

**HIS GOOD MUSICAL SIDE.**—"Have you a good ear for music?" asked the inquisitive guest.

"No," answered Mr. Cumrox; "but I am not unpopular in artistic circles. My ear may be deficient. But I have a good pocketbook for music."—*Washington Star*.

# THIS JOURNAL

would have to be many times its present size to print even brief abstracts of the number of cases of Nervous Exhaustion, Malnutrition, Anæmia, General Debility, permanently cured by

## GRAY'S Glycerine TONIC Comp.

It is an unequalled tonic, restorative, and reconstructive.

THE PURDUE FREDERICK CO.,  
15 Murray Street, New York.



## MICAJAH'S MEDICATED UTERINE WAFERS

LEUCORRHOEA, ENDOMETRITIS, VAGINITIS, GONORRHOEA and all other diseases of an inflammatory character readily respond to its ANTISEPTIC, ASTRINGENT and ALTERATIVE Properties

No powder to spill. Nor water to soil the clothing.

Samples and Literature by mail Gratis

**SIG:** Insert one Micajah Wafer into the vaginal canal, up to the Uterus, every third night, preceded by copious injections of HOT water.

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**TUBERCULOSIS, BOVINE AND HUMAN.**—F. Hueppe, in the *Lancet*, vigorously combats the views advanced at the recent London Congress by Robert Koch. Because the bacillus of man has no hold on the ox, Koch assumes the tubercle bacillus of man and of the ox are of different species. This is, says Hueppe, a bald statement, and he himself utterly repudiates any such conclusion. The histological differences between miliary tubercles in the human subject and the tubercles of Perlsucht in the ox, which differences, however, the majority of pathological anatomists do not deem of such importance as Virchow does, indicate a dissimilarity in the inherent quality of the tissue; but whether this inherent quality will attain its remote or ultimate developments by easy processes or by difficult ones, by the operation of pathogenic agencies of like kind or of unlike kind—on these points the histological appearances supply no data for the formation of an opinion. Only bacteriological experiment can throw light upon the question of communicability and can explain whether in the course of inoculated disease or natural infection a biological or morphological modification and adaptation of a parasite of like kind takes place, or whether only parasites of unlike kind have to be reckoned with. The differences which Virchow discovered long ago and the distinctions which Koch has now found to exist are concerned with quite different things—the one with the inherent quality of the structure and the other with the remote or ultimate developments dependent thereon—and the facts ascertained with regard to one of those do not necessarily serve for the elucidation of the other. The cattle bacillus certainly effects the human subject. We are in fear that it will be communicated to us by the milk of tuberculous animals. The channel of contagion is not the gastroenteric tract so often as is supposed, but is very frequently the tonsils. It therefore appears possible that when fluids containing pathogenic organisms are drunk these organisms make their way into the system from the upper passages—the tonsils—and then the primary focus of the disease is in the region of the air passages; it is, under these circumstances, a mistake to suppose that there is an infection of the lung through the respiration. For this reason Hueppe has a suspicion that many forms of tuberculosis are at present erroneously ascribed to respiration, whereas they ought to be attributed to infection from food, especially milk. Hueppe is not disposed to relax any of the precautions of modern years in reference to

the use of milk and meat. He says that when cattle are allowed to graze at liberty, uncooked milk may be taken with impunity. But in low countries and towns where cattle are herded together in damp cow-houses and infection spreads from animal to animal, Koch's assertion that there is no cause for uneasiness would be an invitation to carelessness which would undo all that has been accomplished. We ought to carry on the struggle against bovine tuberculosis unremittingly, both on account of the economic danger and also because bovine tuberculosis forms an immediate danger to mankind. The question is not whether this danger is great or small, whether it has been overestimated formerly or is underestimated by Koch now; but what has to be considered is that this danger comes upon us in a form which requires the most energetic measures of public hygiene, because the inhabitants of towns, especially the workers in manufacturing towns, are quite unable individually to protect themselves sufficiently against it.—*The Medical Record*.

**NITRIC ACID FOR THE VOICE.**—Dr. Bartholow says that failure of the voice from fatigue or simple mucous laryngitis is often wonderfully relieved by a small dose of nitric acid every two hours, well diluted.—*N. W. Lancet*.

**OTHERS KNEW, IF HE DID NOT.**—"They say," began Miss Twitters, "that there is a fool in every family. Do you believe it, Mr. Saunders?"

"Well—er—I hardly know," stammered Saunders. "You see I am the only member of our family."—*Stray Stories*.

**NOTE CONCERNING A SIGN OFTEN ASSOCIATED WITH EARLY PHTHISIS.**—W. Overend says that in cases which follow the ordinary sequence of initial deposition and consolidation within the upper lobes, accompanied by dulness in the supraclavicular and suprascapular areas, a number of venous varicosities, one-third to two-thirds of an inch in length, may often be observed beneath the skin in the neighborhood of the spines of the seventh cervical and three upper dorsal vertebræ. They appear early and may become very conspicuous. At times they become apparent only after stretching the skin laterally. Local pain is occasionally felt, also slight oedema may be found over these vertebral spines. This is considered due to the peculiar venous ramifications of this area. The sign appears

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**LITERATURE OF VALUE UPON APPLICATION.**

to the author to be useful, and he has not come across it in any of the text-books and special treatises. The attention of the practitioner is at once arrested by it, and the conditions of the posterior apices of the upper and lower lobes is then determined. The presence of auscultatory signs within this dorsal area, combined with wasting and myoidema, he believes, renders the diagnosis of early phthisis, even in the absence of sputum and bacilli, practically conclusive.—*The Med. Record.*

HOW THE PRAYER SOUNDED.—“You didn’t like the minister’s prayer?” “Not exactly.” “What did he say?” “Well, the gist of it was: ‘O Lord, you just do what we tell you and you’ll be all right.’”—*Philadelphia Record.*

E. B. Meyrowitz is a name well known to the scientists of this country, and their microscopes, surgical instruments, ophthalmologic, electric and X-ray apparatus have acquired a reputation on their intrinsic merits. Thus the scientific spirit and ethical methods of this firm command the respect of the whole medical fraternity.

TWO CASES OF CHRONIC HYDROCEPHALUS IN INFANTS TREATED BY TAPPING AND BY THE INTRODUCTION OF ASEPTIC AIR IN THE PLACE OF THE FLUID.—Wm. Ewart and W. Lee Dickinson conclude that, with due precautions, the fluid of chronic hydrocephalus may be completely evacuated from the yet unclosed skull of infants, and aseptic air may be allowed to take its place. This operation may be repeated without detriment, and with scarcely more risk than belongs to the usual method of paracentesis. In favorable cases of moderate effusion a single operation may suffice. Continued oozing from the puncture for a few days after the removal of the tubes is not unfavorable. In cases of considerable effusion an obvious indication is to relieve the brain from the weight and pressure of the fluid. The evacuation is facilitated by the introduction of aseptic air. By a timely repetition of the operation, a hydrocephalic infant might be enabled to carry the weight of the head, and if the treatment were sufficiently early, permanent damage to the brain tissue might be averted, and a normal development might perhaps ensue. In large heads, whilst hydropneumocephalus persists, a considerable risk is run in eliciting this sound by forcible succussion, and for the same reason any abrupt movement of the head should be avoided.—*The Medical Record.*

TONSILLITIS.—Tonsillar sore throat is often much benefited by calomel, in one-fourth to one-half grain doses every two hours.—*Medical Monthly.*

A New York journal asks this startling question: “Should children be spanked?” Yes, the children of other people certainly should, and often.

Bear in mind that George C. Frye, of Portland, is headquarters for all kinds of surgical instruments, and that the quality and the price are all that could be desired.

There are always two political parties; not so much because there are two sides to every public question as because there are two sides to every office, viz., the inside and the outside.—*Life.*

If you are in need of any sort of orthopedic apparatus, trusses, supporters or elastic stockings, you will do well to bear in mind that George Flavell & Bro. have had a large experience in making these goods, and that by skill and fair dealing they have won a host of friends.

PURITY IN THE LAY PRESS.—In recognition of the high standard recently adopted by the *Philadelphia Times*, as commented upon editorially in *American Medicine*, August 10, 1901, the Medico-Legal Society of Philadelphia has passed the following:

WHEREAS, The advertising of abortionists and their drugs as well as other disreputable secret medicines has for years been a notorious disgrace to the newspaperdom of this city—an evil seemingly without redress, and

WHEREAS, The *Philadelphia Times*, under its new ownership, has declared for a high ethical plane, avoiding all sensationalism, while at the same time furnishing “all the news that is fit to print,” excluding all medical and other questionable advertisements, so as to make it indeed a newspaper fit for the family circle, therefore be it

Resolved, That the Medico-Legal Society of Philadelphia highly approves of the advanced stand taken by the *Times*, and urges upon the medical profession generally its active support in aiding to carry out the journal’s elevated ideals.

Resolved, Further, that the medical periodicals of this city be requested to publish the foregoing in their next issues, and that, at the coming meeting of this organization, the secretary report as to which of these, by printing it, have assisted in furthering so desirable a public movement.



# Journal of Medicine and Science.

ISSUED ON THE TENTH OF EACH MONTH.

In the Interests of Public Health, and in order that the People of Maine may reap the great Benefits, both hygienic and economic, assured by a judicious Application of the Principles of Preventive Medicine, this Journal supports the following Propositions and urges Physicians and Laymen to work diligently to further their Consummation.

- 1st. The Establishment of a Sanatorium for the Treatment of the Consumptive Poor.
  - 2nd. The Abolishment of the Coroner System and the Appointment of Medical Examiners.
  - 3rd. The daily Inspection of School Children by School Physicians.
  - 4th. The more liberal Endowment of our Medical Schools by private Charity, and the voting of larger Appropriations to our State and Local Boards of Health.
  - 5th. The Establishment of a State Bacteriologic Laboratory.
- For, surely, health is the prime essential to success in life, and the health of the people is the foundation upon which all their happiness and all their power depends.

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## Original Articles.

### \*The Influence of Flies in Spreading Typhoid Fever.

By C. E. D. LORD, M. D., of the U. S. Marine Hospital at Galveston, Texas.

**A**T the present time, when the aim of modern medicine is, not only to cure if possible the human being afflicted with disease, but also, and far more important from the standpoint of the physician, to prevent such disease, it behooves us as wide awake members of an honored profession to study carefully the means by which prevention can be attained. You will agree with me that, first of all, a clear understanding of the specific cause of a particular disease, joined with a knowledge of the life history, environment and growth of such specific cause, both in and outside of the human body, is absolutely essential to an intelligent effort at preventing the spread of an infection in a community. We, of today, are especially fortunate in that the causes of most contagious and infectious diseases, barring variola, yellow fever, measles, scarlet fever and a few others of less importance, have been discovered beyond all doubts; and especially fortunate are we that, of all the diseases which afflict humanity,

the one most universally distributed over the world—typhoid fever—has become best known.

Recognizing the importance of the subject in hand, it may not be out of place if I trespass upon your time by briefly reviewing the bacteriology of typhoid before developing the real object of this paper.

The honor of having discovered the specific organism of typhoid fever must unanimously be given to Eberth, who, during the years of 1880–1882, first identified the groups of organisms which had been found a decade earlier by himself and several other observers in the bodies of those dying from typhoid, with the lesions of typhoid fever.

Gaffky, in 1884, made the first complete study of this organism as to its morphology, distribution in the body and experimental reactions on animals, and his conclusions have been generally confirmed by subsequent research.

The bacillus of Eberth has the faculty of adapting itself to varying conditions and grows readily on and in various media; holds tenaciously to life under most adverse circumstances and turns up in most unexpected localities.

Temperature has little to do with the growth of this organism, although it shows its appreciation of a comfortable degree of heat by thriving best at body temperature.

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\*Paper read at the Texas State Medical Convention held in Dallas, Texas, May, 1902.

Prudden states that, after keeping a culture frozen for three months at  $-11^{\circ}$  C., he was still able to obtain live bacilli.

Again, bacilli have been exposed to drying on all kinds of media, including all kinds of clothing material, foodstuffs, wood, bedding, furnishings of all kinds, and in earth, but under ordinary conditions resisted dessication from 1 to 4 months, depending upon the medium used and the thickness of the layers in which they were exposed.

In water they develop to some extent, but retain their vitality in proportion to the amount of organic nitrogenous material contained therein. Estimates running from 5 days (Hochstetter) in distilled water to 81 days in sterilized river water (Strauss) have been made, and that the age of the culture transplanted to the water influences the longevity has been clearly demonstrated by Jordan, who found that a young and active colony survived 93 days in sterilized water from Lake Michigan and 18 days in distilled water, while an old culture lived less than 6 days in the distilled water.

In view of these experiments conducted with sterilized water, we must necessarily consider that the organisms under discussion would survive much longer in ordinary unsterilized drinking water.

Uffelmann, experimenting with *fæces*, found that the germs lived more than 4 months at a temperature between  $17-20^{\circ}$  C. ( $62.6-68^{\circ}$  F.), provided the material were feebly alkaline, and that in ordinary soil from 3 to 5 1-2 months, according to the method of exposure, living longer in the deeper layers of the soil than when exposed to the direct rays of the sun on the surface.

Robertson, working along the same lines, has shown that these organisms may survive from one summer to the next, provided there be enough organic matter present in the soil, but that if this medium be uncontaminated with such matter they quickly die out.

An extremely interesting experiment, and one of vital importance to the sanitarian, is that conducted by this same investigator, in which cultures planted 18 inches underground grew to the surface, while those planted on the surface grew downward only 3 inches. In both of these experiments he found that the bacilli did not spread laterally to any extent. In dust, the organism probably survives several weeks, as French investigators claim to have found it in the dust in certain barracks, but no statement other than the above noted general one can at present be made. The bacillus lives 35 days in milk; 30 days in oysters (Foote);

21 days in butter; 3 days in cheese; 3 days immersed in a liquid containing .03 per cent. of HCL, and 2 hours in pure gastric juice according to Strauss and Woertz.

Such is a brief history of the resistance of this germ in media outside the body; let us now consider its persistence in the body. Here, again, we find diverse statements, varying from months to years. For example, Buschke states that cultures were obtained from an old focus of inflammation in bone 7 years after the original infection; Orloff isolated them from a periosteal inflammation after 6 1-2 months; and Chantemesse found them 9 months after infection in the pus of an osteomyelitis.

Other estimates run from 8 to 10 months, but material was always obtained from situations most favorable for the protection of such organisms from exposure to sunlight, direct drying and extremes of temperature.

The conclusions to be drawn from the foregoing statements are that the bacillus typhosus may persist outside the body from 2 weeks to many months, according to the media in which they may be deposited, while in the body they may live almost indefinitely in tissues subject to slow inflammatory changes due to infection with this organism.

It is beyond the scope of this paper to dwell more than a minute on the pathology of this disease, and indeed unnecessary in a meeting of this character, but for the proper presentation of the subject allotted me a brief enumeration of the ways in which this organism is eliminated from the body may not be out of place.

In typhoid fever, as in many diseases of specific origin, the organism chooses certain localities in the human body where it develops and throws out its toxins to be absorbed and give rise to the symptoms peculiar to each set of toxins—some common to all—and the bacillus of Eberth is no exception to this rule, since it shows marked preference for the lymphoid structures and mucous membrane of the lower small intestine and upper colon.

The first development takes place in the Peyer's patches and solitary glands of this region; spreads by lymph channels to the neighboring mesenteric glands, and finally, by blood current to the spleen, liver, lungs, kidneys, nervous system, bones, larynx, pharynx, and, in fact, may invade almost any and every tissue in the body to give rise to the many complications and sequelæ so troublesome to the medical attendant in such cases. Naturally, knowing the primary location of development of this

organism, we would look for it in the fæces, and secondly, knowing that it invades other organs of excretion, would expect as a logical sequence to find the bacilli in the excretions of those organs.

That such is a fact has been proved by many investigators, so that our next step will be to determine as accurately as possible how soon after infection, and by infection, for the purposes of this discussion,—we may discard all other ways except ingestion,—the micro-organisms may be found in the excreta.

Munson, in his valuable work on Military Hygiene, says that the bacillus typhosus is not usually found in the stools before the 7th day, but that the latter are probably infective during the incubation period and certainly during the onset of the disease; he also states that the stools appear to gain in infectivity for several days after discharge from the patient, and that bacilli have been found, in some cases, in the stools passed 41 days after deferescence.

That bacilli may appear in the stools of people in normal health has been claimed by some and denied by others, but the known fact that many people may have a mild form of this disease and continue to walk about makes it probable that there are grounds for claiming that the organism has been found in the dejecta of apparently healthy subjects.

In the urine, as would be expected from what has been stated regarding the spread of bacilli through the blood current from the focus of primary infection, they appear later in the course of the disease, but make up for the tardiness of their appearance by the numbers in which they appear; pure cultures having been found by some observers and in some cases, rendering the urine turbid by their presence in such enormous numbers.

As a general rule, then, the urine is infective at a later stage of the fever than the fæces, but remains infective much longer, even to 2 months after the temperature has become normal (Petruschky).

Bacilli are found in the sputum in smaller numbers and in a smaller proportion of cases than in the urine, practically being confined to those cases exhibiting involvement of lungs or mucous membrane of the air passages.

The last of the excretions, the sweat, has the doubtful honor of being free from these bacilli, although Geisler claims to have found them in one instance, but I am sure that his statement will be taken with caution when we consider the numerous ways in which a patient with typhoid can soil the surface of his body from the other excreta.

To recapitulate, we find the bacillus of Eberth in the fæces, urine and sputum, and incidentally on any object that might be contaminated by these excreta.

Having traced the specific organism through the human body, having dealt with its powers of resistance in various media outside the body, having noted its persistence in the numerous tissues of the body, and having shown the means by which it is eliminated from the body, we are now ready to start with the subject matter proper,—The Influence of Flies in Spreading Typhoid Fever.

The common house fly (*Musca Domestica*) has, since 1898, received considerable attention by sanitarians because of the conclusions reached by U. S. Army Commission, convened to investigate the origin and spread of typhoid fever in the military camps during the Spanish War of 1898, and because of reports by the medical officers in charge of the concentration camps prior to the appointment of this commission.

In 1899–1900, Prof. L. O. Howard, Washington, D. C., conducted extensive experiments to determine the life cycle of this insect, and to discover, if possible, to what extent the fly would develop in human excrement. These experiments were not the first which this careful observer had conducted along the same lines, but in the first series, carried out in 1895, he had concluded that the common fly developed almost exclusively in horse manure and at that time had been unable to rear them in human excrement.

The former experiments were carried out under conditions different from those natural to the fly, inasmuch as the insects were kept in captivity, and it was not until 1899 that he changed his methods and subsequently his views on the subject.

As the result of his labors, we can now place the three stages in the development as follows:

Egg stage, 8 hours,  
Larval stage, 5 days,  
Pupal stage, 5 days,

or ten days for the entire development of the fly. Each female laid approximately 120 eggs; the eggs were deposited in human excrement and adult flies easily reared from them when such excrement was exposed out of doors and the flies were allowed to obey their natural instincts. Both sets of experiments confirmed his first statement that horse manure formed the favorite breeding place of these insects and that this material was responsible for 95% of the flies in a community.

When the life cycle and history of this common pest is considered, and the fact that from ten to twenty generations may be bred during the summer months, it is not an effort to solve the mystery as to how they occur in such myriads.

That the house fly is not the only species attracted to and breeding in human excrement was proved at this time, but that all others may be disregarded by the physician when the varieties captured on food supplies are considered, will be evident from the following statement of Prof. Howard, who says: "In all, 23,087 flies were examined which had been caught in rooms in which food supplies are ordinarily exposed and which may safely be said to have been attracted by the presence of these food supplies. Of these 23,087 flies, 22,808 were *Musca Domestica*, i. e., 98.8% of the whole number captured."

The anatomy of the fly may be omitted with the remark that its feet are particularly adapted to the carrying of infective filth of all kinds, and this, in connection with the well known habits of the insect, adds another black mark to its record, otherwise bad enough as a destroyer of domestic comfort.

Another way in which the fly can carry infection was found as early as 1888, when Celli fed pure cultures of the *bacillus typhosus* to flies and the recovered virulent bacilli from their excrement.

We have, then, two ways in which infection may be conveyed by flies: 1—Infective matter, feces, urine, sputum, earth infective through deposit of any of these excreta, or, in fact, any material that has become infected by contamination may adhere to the feet of the fly and so be transferred to food ready for human consumption.

2—Flies feeding upon infected material may transport the infection in their digestive apparatus and deposit it upon food with their excrement.

The Army Commission, while devoting especial attention to the water supply of the camps with regard to possible contamination through surface drainage from infected sinks in the neighborhood, became convinced that only a small proportion of the 20,000 odd cases of typhoid fever which developed among the troops there detained during the summer months could be traced to an infected water supply; and, in view of the fact that during an epidemic too much attention is often devoted to the water supply to the exclusion of other just as important factors in the spread of this disease, I will mention one of the facts which led them to this conclusion.

At Jacksonville, Fla., and at Knoxville,

Tenn., the water supply of the troops quartered there was drawn from the same source as that used by the residents of those places, yet at the time when the admissions to the army hospitals averaged twenty per diem there were practically no cases among the inhabitants of those two cities.

Regarding flies, this same board says: "Flies undoubtedly served as carriers of infection."

The reasons for this statement were several and will be given.

It was a standing order that earth, lime or ashes should be sprinkled over the fecal matter in the sinks three times a day, and in numerous instances where lime had been recently used flies with their feet whitened with this substance were seen walking over the food in the mess tents, a condition of affairs quite convincing to an ordinary mortal you will agree.

Perhaps the most convincing argument in proof of the agency which flies exerted in disseminating this disease is furnished by the charts showing the proportion of cases at different times of the year with reference to the fly pest.

Because of its tendency to appear in the late summer months, typhoid has long been known as autumnal fever, yet in the army camps this disease was at its maximum during the season when flies were most abundant, and with the disappearance of these pests there was a corresponding diminution in the cases of typhoid, and at the very time when the number of cases in civil life had begun to increase.

That this decrease with the disappearance of the flies was not due to a lack of susceptible material was carefully investigated and proved not to be the case, as several newly recruited regiments which had not been at Chickamauga or any other infected camp were received at Knoxville, Tenn., in September, at a time when there were numerous cases among the older troops quartered there and practically none among the residents of the city.

These new regiments developed typhoid soon after arrival and while the fly pest was at its height, but the disease disappeared among these fresh troops at the same time that it disappeared among the older organizations and coincident with the disappearance of the flies.

One more point arguing in favor of flies having been one of the chief agents in spreading the disease in question is found in the statement of this commission, supported by figures, that typhoid was less prevalent

among members of messes who had their mess tents screened than among those whose tents were not so protected against the invasion of flies.

While this paper was to be confined to the influence of flies in spreading typhoid fever, I have taken the liberty to touch upon certain points foreign to this subject; I have also taken the liberty of quoting freely from the report of this Commission as affording concise statements, and because the statements so made are supported by unimpeachable evidence. It may be said that the conditions prevailing in an army camp are not such as are found ordinarily in a civil community, and that for this reason the statements made should be modified.

In reply, it may be said that each community represents, in miniature, a military camp without the military discipline, and that if such conditions existed under military rule as to allow such a spread of infection as took place during 1898, how much more likely would such spread take place in the civil community which lacks the sanitary supervision practiced in the military camp, provided a focus of infection were furnished? It is true that in a military camp the ratio of inhabitants to space of habitation is greater than in a small community, but in the former, men in the prime of life, the pick, physically, of the country are confined; in the latter, the sick and physically weak are indiscriminately mixed in with the healthy, another point in favor of leaving the statements already made relating to the one unmodified when applying them to the other.

The natural conditions of an ordinary city and military encampment as to drainage and sewerage with regard to removal of human excrement are much the same, with the exception that in the latter special precautions are taken to make up for the defects left by nature, while in the former, and especially in outlying districts, too much is left to Divine Providence.

Every city and town worthy the name has its health officer, sanitary rules and regulations, but here too often they stop, believing that the fact that such precautions have been taken will act as a safeguard to the community, and overlooking the fact that, unless funds in sufficient amount are provided to insure the proper enforcement of these regulations by this officer, such rules and regulations stand as a constant menace, inasmuch as they give a false sense of security.

Before closing, I would like to emphasize one thing, which, I trust, has already been made clear, viz., that in a disease so univer-

sal as typhoid, and one whose mode of transmission is so well understood, the three excretions, fæces, urine and sputum, should be considered the sources of all infection, and in all cases of fever, not absolutely diagnosed, these excreta should be considered infective and so treated as to render them innocuous.

Of the three, I would emphasize the need of taking special care of the urine, remembering that in typhoid we find the specific organisms here in practically pure cultures, even when there are no marked symptoms denoting involvement of the urinary system, and that they may persist in this excretion long after convalescence has been well established.

The indiscriminate voiding of both fæces and urine in places not designed for their reception, an act too often practiced after dark in out-of-the-way places, should be made punishable by law, and particularly in the case of urine, which, being practically without odor, escapes the attention of the health department.

If such measures could be taken, two of the chief foci of infection would be removed from whence transference to man by the fly is possible. It is unnecessary to say that in diagnosed cases of typhoid absolute disinfection of all excreta should be insisted upon by the medical attendant, and for this purpose nothing is cheaper and better than Milk of Lime in the proportion of one part of water-slacked lime by weight to four parts of water, mixing the materials thoroughly, viz., excrement and solution, and allowing them to stand thirty minutes before they are finally disposed of, by burning preferably where the water carriage system of sewerage is not employed.

The nates should be carefully cleansed with a disinfecting solution and the material so used burned at once. All soiled bedding or other clothing of the patient should be wrapped in a sheet wet with a 1-1000 sol. of  $\text{HgCl}_2$  and then disinfected.

Access of flies to the patient or excreta should be prevented; to the first, by screens; to the second, by protecting the bedpan with a rubber covering while disinfection of contents is going on, and finally by disinfecting both bedpan and covering.

Access of flies to faecal matter in privies should be prevented by covering all excreta upon deposit with dry earth, or better, lime.

It would be ideal if that common nuisance, the box privy, could be abolished, but this being out of the question, the next best thing is strict supervision by the municipal authorities requiring the boxes to be made of some

material which will not absorb the discharges or allow them to leak out, such as galvanized iron, requiring the discharges to be covered with earth or lime, the boxes properly cleansed at stated intervals and imposing a heavy penalty for disobedience.

To diminish the fly pest, it should be remembered that, according to Howard, 95% of all flies select horse manure in which to deposit their ova, and, bearing this in mind, efforts should be made to remove this material from the streets and alleyways to some place where it can be disposed of properly before the ova have had time to hatch.

#### NEW YORK ACADEMY OF MEDICINE.

##### Section on Orthopedic Surgery.

(Meeting of April 18, 1902.)

GEORGE R. ELLIOTT, M. D., *Chairman*.

Dr. J. H. Waterman presented the case of a child with congenital elevation of the left scapula. The X-ray revealed the condition of elevation and also a bony plate running from the spine of the scapula to the seventh cervical or first dorsal vertebra. The advice of the Section was asked as to treatment. It was stated that Wilson, of Philadelphia, had reported two cases treated by operation. In standing, the elevation of the shoulder was marked and the head was held slightly inclined to the left side.

Dr. Russell A. Hibbs said he had observed a similar case in a subject 25 years old, showing also a plate of bone connecting the scapula and the seventh cervical or first dorsal vertebra. He advised operation in the case presented by dividing the bony attachment.

The Chairman wished to know what was done in the cases referred to, after division of the bony plate of attachment to prevent reunion.

Dr. S. A. Twinch stated that he had witnessed the operations of Dr. Wilson referred to, and that no steps had been taken to prevent reunion.

#### CONGENITAL DISLOCATION OF THE HIP.

Dr. Royal Whitman presented a series of ten cases illustrating the treatment of congenital dislocation of the hip. The cases were of interest as demonstrating the curability of the affection.

In the entire number there had not been a relapse since treatment had been discontinued. With one exception, the patients had been operated upon by the bloodless

method of Lorenz, slightly modified in certain instances. At the present time, as would be evident upon inspection, it was impossible to say which limb had been treated.

The record of the cases is as follows:

1. C. P., female, dislocation of the left hip, operated upon at the age of nineteen months, April 19th, 1897. The plaster bandage was removed on October 12th, 1897.

2. O. H., female, dislocation of the left hip, operated upon at the age of five years, May 20th, 1897. Plaster bandage removed March 15th, 1898.

3. L. S., female, dislocation of the left hip, operated upon at the age of nineteen months, November 15th, 1897. Plaster bandage removed June 15th, 1898.

4. C. F., female, dislocation of the left hip, operated upon at the age of two and a half years, October 11th, 1899. Plaster bandage removed June 2, 1900.

5. A. C., female, dislocation of the right hip, operated upon at the age of two and a half years, January 28th, 1900. Plaster bandage removed August 9th, 1900.

6. V. R., female, congenital dislocation of the left hip, operated upon at the age of four and a half years, January 31st, 1900. Plaster bandage removed August 22nd, 1900.

7. E. R., female, dislocation of the left hip, operated upon at the age of two years, May 22nd, 1901. Plaster bandage removed September 13th, 1901.

8. F. C., female, dislocation of the left hip, operated upon at the age of four years, July 2nd, 1901. Bandage removed January 7th, 1902.

9. M. L., female, dislocation of both hips, operated upon at the age of two years, May 10th, 1899. Plaster bandage removed November 10th, 1899. A perfect cure on the right side, not perfect on the left.

10. M. A., female, dislocation of the left hip, operated upon at the age of five years, October 30th, 1900, by arthrotomy, without excavation of the acetabulum. Plaster bandage removed October 10th, 1901. Perfect cure.

Dr. Whitman said that Case No. 5 had been of much interest. On removal of the spica bandage a limp had persisted for many months, accompanied by slight outward rotation of the foot. If the limb were rotated slightly inward the X-ray picture showed an apparently normal joint. The persistence of the limp was due apparently to laxity of the capsule and to slight anterior twist of the

upper extremity of the femur. To his surprise the child had steadily improved, and at the present time, more than a year and a half after the discontinuance of treatment, there was practically no trace of disability.

In case No. 9, the bilateral displacement, the left hip was originally recorded as a transposition, but after a lapse of nearly two and a half years there was no shortening and but a very slight limp. The head of the bone was apparently secure in a position slightly anterior and external to the normal. This result was far better than after the ordinary transposition, in which there was always a certain amount of shortening and a characteristic limp.

The case in which arthrotomy was performed was not only of interest, as showing the perfection of the cure obtained by this method, but also in that the patient is one of three children of one mother, each having congenital dislocation of the left hip. The eldest child, now about eighteen years of age, was untreated and presents a shortening of the limb of three inches. The second child, after three unsuccessful attempts by the bloodless method, was operated upon by the Hoffa-Lorenz method, with excavation of the acetabulum on Oct. 25th, 1898, at the age of five years. The final result was very satisfactory.

Dr. R. H. Sayre considered that the result of the cases presented a great advance in the treatment of congenital dislocation, and that a few years ago such a collection of successful cases would have been impossible.

Dr. George R. Elliott said the remarkable showing of good results by Dr. Whitman ought to fully answer those still skeptical about the non-cutting operation. He noticed that the patients were all apparently under four years of age at the time of operation. A very large percentage could be cured at that age.

The Lorenz method, even if it did no good, certainly did no harm, and in older cases, warranted its use before cutting was resorted to.

He further said that it could usually be determined at time of operation what the final results would be, at least such was his experience.

He asked Dr. Whitman what percentage of his operations showed failure, and if he reduced both hips at time of operation in double congenital hip dislocation.

Dr. Whitman stated that in the case of bilateral displacement, both hips were treated at one sitting. He said that he had modi-

fied the Lorenz method somewhat, in that he usually extended the plaster bandage below the knee, the leg being flexed upon the thigh at a right angle, with the object of fixing the part more securely. At the end of two months the leg portion of the bandage was removed. In certain instances the femur was rotated slightly inward, in order to fix the head of the bone directly beneath, or slightly internal to, the femoral artery. He had on other occasions stated that not more than twenty-five per cent. of the cases were cured by this method, but the indications in his later operations were much more favorable. He did not agree with the statement of the last speaker, that the result of treatment could be foretold at the time of operation. In many instances an anterior twist of the upper extremity of the femur made failure inevitable, and in many instances arthrotomy and osteotomy would be essential, excavation of the acetabulum being reserved for exceptional cases.

#### COXA VARA.

Dr. Whitman presented a boy about seven and a half years of age, illustrating the cure of coxa vara by cuneiform osteotomy at the base of the trochanters. The patient had been presented to the Section at a previous meeting by Dr. Taylor. According to the mother's account, he had limped ever since he began to walk. Although the operation was performed but five months ago, the functional cure was perfect.

#### ALCOHOLIC ARTHRITIS.

Dr. Elliott presented the case of a boy aet. 12 years, who some three years ago began to have swelling of the joints of the fingers and wrist. The right wrist, the distal joints of the fingers of both hands and the distal joints of the first and second toes were involved. The liver was enlarged, projecting below the umbilicus, the spleen was enormously enlarged and there was only a slight enlargement of the lymphatic glands.

The mother stated that the boy having been badly nourished, she had given him whiskey daily for about 1 1-2 years. He regarded this as the etiological factor of what he thought could rightly be designated alcoholic arthritis.

Arthritis deformans was excluded, since that grows progressively worse and is not accompanied by enlarged spleen. Under proper nourishment and little general medication the symptoms had nearly all disappeared—Heberden nodes still persisted, something very rare in children.



#### DESTRUCTION OF THE LOWER EPIPHYSIS OF THE TIBIA.

Dr. Hibbs presented the case of a boy aet. 11 years first Sunday, October, 1900, with deformity of right tibia following a severe fall supposedly resulting in fracture. The deformity was corrected by osteotomy. He suspected that the lower epiphysis of the tibia had been injured and this was corroborated by the recurrence of the deformity after operation.

At time of operation the right tibia was twelve and one eighth inches long and the left thirteen. If left untreated the deformity would progress. Members of the Section were asked if they had any experience in the treatment of such cases by destruction of the epiphysis of the fibula.

Dr. Whitman said that a member of the American Orthopedic Association had made the statement at its last meeting that he suffered from a disability similar to the case reported; that his fibula was two inches longer than the tibia, yet the disability and deformity were so slight that from his personal experience he had advised against operation such as had been suggested.

Dr. Sayre said he thought destroying the epiphysis of the fibula, as suggested by Dr. Hibbs, would not result in as useful an extremity as by leaving the limb untreated, since it would produce considerable shortening. He suggested slitting the tibia lengthwise, sliding the pieces past each other and so lengthening the tibia sufficiently to bring the articular surfaces parallel with the ground.

Dr. Hibbs also presented a child aet. 3 years when first seen by him in October, 1900. One month previously it had been operated upon in a general hospital for osteomyelitis of the lower end of the right femur. This was followed by complete paralysis of the quadriceps extensor. This paralysis persisted with no response to either electrical current. No other muscle was affected, and it was believed to be due to division of the tendon or muscle with failure to unite.

#### FRACTURED VERTEBRAL COLUMN.

Dr. Elliott presented a specimen of a fractured vertebral column removed from a man aet. 29 years, first seen in 1897. One year prior to that he attempted to hold a quarter of beef, which had slipped from its pin, and immediately felt a severe pain in his back. He remained in bed one week. He then attempted to go about and did so for one year with gradually increasing motor and sensory paralysis of both lower extremities,

and there developed a marked kyphosis at 10<sup>th</sup> dorsal vertebra. Plaster jacket did not improve matters. The paraplegia became complete.

He was subsequently operated upon by Dr. Gerster at the Mount Sinai Hospital, and evidence of fracture was found, with bony fragments pressing upon the cord. These were removed, but Dr. Gerster expected no benefit to result. Patient finally died and the cord was found completely severed. Deep reflexes lost.

The progressive nature of the paralysis and the absence of involvement of the bodies of the vertebrae with a well marked kyphosis were interesting features, and also the faulty diagnosis of caries, which at one time had been made. The angular prominence simulated the "Bos" of Pott's Disease very closely.

Dr. W. M. Leszynsky considered the history of the case very interesting, and thought that it was hardly probable that anyone from the history would have made a diagnosis of fracture. He thought there was a slight injury to the cord and dura, which set up a myelitis secondarily, becoming finally complete, with ultimate destruction of the cord. It was well established now that complete division of the cord produced loss of all reflexes below the site of section. He cited a case of his own, of a patient who had fallen from a height of twenty feet, fracturing the tenth, eleventh and twelfth dorsal vertebrae, with immediate paralysis and complete loss of reflex action, sensory and motor power. The diagnosis was readily made in that case and confirmed at autopsy.

#### EARLY TREATMENT OF DISABILITY FOLLOWING INFANTILE PARALYSIS.

Dr. A. B. Judson reported a case of varus of the left foot in a boy of five years. Leverage by braces cured the varus, but could not remove paralysis of calf muscles and calcaneus. The riser was omitted from the inner side, where it had given leverage against the varus, and the upright was made of one piece with the tread, which was shaped to the instep and could readily be bent down or up, as the boy required more or less "toe" in walking. With this brace (exhibited), walking was without a trace of lameness. Deformity had been prevented and fibres developed which, without early locomotor activity, would have disappeared.

Dr. Charles H. Jæger presented specially made gouge devised by a French surgeon for purpose of scooping out the acetabulum in operation for congenital dislocation of the hip.

## Therapeutic Suggestions.

Dr. Seneca Powell and several German surgeons contend that alcohol thoroughly controls the action of carbolic acid and enables us to use this antiseptic in strength of 95 per cent. even in abscess cavities and in bone sinuses.

The strong carbolic acid is poured in and then the suppurating pocket is thoroughly irrigated one minute after with absolute alcohol.

This method, however, does not seem to have come into general use among American surgeons, and the journals are full of warnings against poisoning and gangrene resulting from the use of even weak solutions of carbolic acid. It is only fair, however, to add that German surgeons contend that there is much greater danger of poisoning when a weak solution is kept constantly applied for a long time than in the momentary use of a 95 per cent. solution, counteracted by absolute alcohol.

This method has also been employed in the treatment of hydrocele and Phelps has used it in certain cases of tuberculous joints.

The Murphy button has now been in use by surgeons for eight years, and the following facts seem to have been established in regard to it:

1. It approximates without suture.
2. The time of operation is much shortened.
3. The union is ideal.
4. There is no contraction of the scar.
5. The physiologic function of the gut is not interrupted at any time.

There seem to be two great objections to the use of the button.

1. The opening may be occluded by food or other particles prior to the sloughing of its attachments.
2. There may be prolonged retention of the button in the gut or the abdominal cavity.

Maurice H. Richardson, in a paper read before the Boston Society for Medical Improvement, makes the statement that so-called phantom tumors are formed by a dilated intestine under a spasmodic abdominal wall. The spasm of the muscle is doubtless secondary to the intestinal lesion and dependent upon it, and it is involuntary. If the intestinal dilation is moderate and distributed throughout a considerable portion of the colon, relaxation of the muscle spasm is followed by a flattening out of the dilated bowel and the tumor disappears. When,

however, the dilation is excessive and limited to a small area, especially if gas does not readily escape, muscular relaxation produces no change in the contour of the tumor. Phantoms are early and moderate dilations of the colon, and such disappearing tumors will sooner or later become real ones, removable by excision only.

From W. B. Coley's latest report on the use of the mixed toxins of erysipelas and bacillus prodigiosus in the treatment of inoperable sarcomas, it appears that about 4 to 5 per cent. of cases of the round celled variety are benefitted and about 50 per cent. of the spindle celled.

Thomas R. Brown and Howard A. Kelly, after using a combination of nitrous oxide and ether as an anesthetic in over 200 cases, strongly recommend it to the profession. Hewitt, LeBreton, Galloway, Bird, and others have tried this combination and are impressed with its usefulness.

Biagi claims excellent results from iodine injections in tubercular peritonitis. He uses a sixth to half grain of iodine in solution. This causes pain, but there is no risk.

Dr. Carl Beck, in a paper read before the Chicago Medical Society, in which he reports two cases in which a sponge had been left in the abdominal cavity and cites three cases in which silk ligatures had sloughed into the bladder, the bowel, and uterine cavity, summarizes his conclusions as follows: Silk ligatures are not so harmless as they are usually regarded, and absorbable material should be preferred. If unabsorbable material is used, small and interrupted sutures should be employed. It takes less time for the interrupted sutures to slough out. A route for egress should be prepared, if ligature suppuration is suspected. Even catgut may sometimes cause such symptoms.

Dr. Alfred King, of Portland, reports in the *Medical Record* a successful case of pylorectomy in a man 71 years old. The operation lasted three hours. When the abdomen had been opened, the tumor was seen to involve the pyloric end of the stomach only, and there were no adhesions and very little involvement of the lymphatics. The portion of stomach and duodenum removed measured 4 inches in length. The patient made an excellent recovery, and 11 months after was in excellent health and had gained 14 pounds in weight. The tumor involved the whole circumference of the pylorus, and examination proved it to be a scirrhus carcinoma.

Iodid of potassium seems to be an efficient remedy in actinomycosis, but it must be pushed. Beraro employs a 1 per cent. solution of iodid of potassium, and of this he injects hypodermically 15 minims into the infected area.

Ware, in a recent paper, says that since air is the best antiseptic in tetanus infection, the open treatment of wounds should be employed when the presence of this bacillus is suspected. He reports 11 cases of wounds from toy pistols treated in this way, and none developed tetanus.

Abbe is a warm advocate of the efficacy of intracerebral injections of anti-toxine in the treatment of tetanus.

Binaghi has asserted, after many experiments, that the staphylococcus is the germ most frequently found in the atmosphere of operating rooms and hospitals, and that the number of this germ present is in proportion to the number of persons present. He and Flugge therefore recommend that as few persons as possible should be allowed in the operating room.

Persons in the operating room should not be permitted to leave while the wound is exposed, because if a class of students leave at this time the dust is raised and the particles float in the air and the dust particles convey the bacteria.

G. Oeder claims that he is able to cure hemorrhoids by postural treatment alone. The principle involved is that the swellings are due to the weight of the blood column, the venous blood traversing the great distance from the rectum to the heart unsupported by valves. So that, if the anus is raised to a position above the height of the heart, the force of gravity is then towards the heart, the congestion and pain are reduced.

The pelvis is raised by means of pillows until it is about 10 inches above the heart. During an acute attack, one or two night's rest in this position is often all that is necessary, and he says that even chronic cases can be cured by prolonged use of this posture during the sleeping hours.

J. Collins Warren reports 98 cases in which he operated for the radical cure of inguinal hernia and obtained good results one year after operation in 84 per cent. of all treated.

In umbilical hernia, his results were not so good and in this type he recommends early

operation, as both suppuration and recurrences are more likely to occur.

Warren urges the use of silk, deeming it the best suture material we possess in this class of cases. In this conclusion he will find many surgeons not agreeing with him, for Coley and many other skilled operators prefer either catgut or Kangaroo tendon, both of which, when properly prepared, are as free from danger of infection as silk.

Barker insists that the sutures, of whatever material, should not be tied too tight, for a tight suture tends to cause necrosis and pus organisms lodge and multiply at such a point of least resistance.

Franke reports one case in which he removed the entire pancreas for cancer, and the patient lived for six months.

M. Goulliond reports a case in which a nail 2 inches long was successfully removed from the bronchus by means of an electro-magnet passed through a tracheotomy wound into the trachea.

Several cases are on record in which pulmonary abscesses have been diagnosed and located by means of the X-rays.

Terrier and Raymond have collected 11 cases in which wounds of the heart were sutured and 3 patients recovered. Two patients died of hemorrhage and four with symptoms of infection.

Carl Beck advocates the use of rubber drainage tubes, pressed into the adjoining interosseous spaces, for the treatment of fractures of the metacarpal bones with lateral deformity. They are kept in place by adhesive strips, passed around the hand, and the whole is covered by a moss splint.

Attention has many times been directed during the past year to the role which the urine undoubtedly plays in the dissemination of typhoid fever. It has been proved that the germs exist in the urine long after convalescence has been established.

Herman says that antipyrine and phenacetine are the best drugs for the relief of uterine colic.

Drew thinks both pectoral muscles should be removed in every operation for cancer of the breast, for it facilitates closure of the wound, gives easier access to the axilla, and because when the pectoralis minor is left, its lower border forms a prominent cord which causes discomfort.

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PORTLAND, MAINE, JULY, 1902.

### Venereal Diseases.

As he stated in his essay, every physician knows that venereal diseases are the direct cause of much misery and suffering in the world, and that oftentimes the worst of the suffering falls not upon the sinner, but upon the innocent victims, his wife and children. Here, in truth, are a group of diseases in which the sins of the fathers are visited upon the children, even unto the third and fourth generation, and every physician knows that the complications and sequelæ of syphilis and gonorrhea are the causative factors in the death of many men, women and children every year. So general and so widespread are these preventable diseases, too, that the profession is fully awakened to the importance of staying by every means possible their ravages, and any practical means of accomplishing these results will be welcomed by all.

A notification law would be a benefit, in

that it would tend to call the attention of the public to the seriousness of the question, and to arouse a public sentiment in favor of taking active measures to abate the evils, but, for all this, such a law would be much more honored in the breach than in its observance, and a non-enforced law is a dangerous thing on the statute books, for non-enforcement always tends to bring all law into disrespect and disrepute.

Such a law would also prove of value if enforced, in that it would aid in the collection of medical statistics bearing upon this important matter—statistics which are now almost entirely wanting in every state—but if the law should work to drive such patients away from physicians to quacks, we should be worse off for statistics than we now are.

As has been said, the need of doing something to lessen the evils of venery is very great, and physicians have been active to devise ways and means to bring such a worthy result about, but in the light of the difficulties attending the notification plan—difficulties which would work actively to defeat our object—it seems that the Committee of the American Medical Association advocated a wiser plan when they advised that a greater effort should be made to promote and spread a knowledge regarding the prophylaxis of venereal diseases.

Of late much has been said in medical journals of the duty which the medical profession owes to the public. To educate the people in regard to matters of public health is a plain duty of the profession, and a duty which only physicians can discharge. The public is greatly in need of enlightenment in regard to the evils and the dangers of the ravages of venereal diseases, and when the time shall come when every state medical society shall devote one evening to education of the laity, the subject of venereal diseases is one which might well receive early attention.

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### Three Things that Promise Well.

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There are three procedures in medicine occupying the earnest attention of medical men of the present time which seem to hold, at least, great promise for the future. Cancer is a disease which statisticians declare to be on the increase. It is a disease of the etiology and pathology of which we know little, and for the cure of which our means are limited. All over the world, large sums of money are being devoted to the work of finding the causation of cancer, and the most

eminent biologists, bacteriologists, chemists, and clinicians are devoting their time and energy to giving us a means to more successfully combat the ravages of this scourge. So far all this money and effort have been productive of few practical results, though much of real value has been determined. There is one plan of procedure, however, which, while yet in its incipency, seems to hold forth something of hope, at least, to sufferers from certain forms of this troublesome disease, and that is the X-ray treatment of cancer. Already many series of cases, treated by different physicians, have been reported and in most of these cases improvement of the most distressing symptoms have resulted, and in some of the cases remarkable results have been achieved. At the present time the X-ray treatment seems to hold out the most hope, especially in those cases which have become inoperable. While, in our present knowledge, we are not able to promise a cure in any case, yet the improvement has been so marked and the good results achieved in a few cases have been so remarkable as to give us hope that, as we gain in knowledge of, and in dexterity in applying, this therapeutic agent, much better results may be expected.

*Second.*—Bright's disease causes many deaths every year, and, while certain forms of the disease are not incompatible with a long and comfortable life, yet it has been considered a fatal and almost incurable condition. Lately, largely through the work and investigations of one physician, Dr. George M. Edebohls, of New York, we have come to know that surgery offers us great hope of curing many cases of even advanced Bright's disease. By means of a not very difficult operation upon the capsule of the kidney, great improvement follows in the symptoms of the disease—albumen and casts disappear from the urine, and in many cases a permanent cure has resulted. Following the reports of the success of Edebohls' operation, other surgeons have become interested in the cure of chronic Bright's disease through surgery, and we can only hope that the future of this operation will remain as bright as the present promises.

*Third.*—Recent statistics seem to prove that in some of the states pneumonia causes more deaths than consumption, and all over the country it is a common and dangerous disease.

Recent reports in medical journals show favorable results in the treatment of pneumonia with carbonate of creosote. In some cases the disease seems to be aborted, in

others its course is cut short, and in almost every case favorable results have followed the use of this remedy. So encouraging are the results of this method of treatment that we hope the physicians of Maine will give creosote carbonate a fair and impartial trial in pneumonia and will report their results.

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#### Old Home Week.

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Maine will extend a hearty and cordial welcome to all returning sons and daughters during the week of August 2-9. Visitors, not natives of the state, will also find much to interest them at that time. Almost every city and town in Maine is enthusiastic in extending hospitality to all those who pay them a visit during Old Home Week, and they will take much pleasure in greeting and welcoming the coming guests.

At this season of the year, the Pine Tree State is at its best, and nature can be relied upon to do her share in making it pleasant and profitable for visitors. In some of the cities elaborate programs for the entertainment of all have been prepared, and all who return to the state during Old Home Week will be sure of a kind welcome and a pleasant visit.

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#### Reviews.

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**TEXT-BOOK OF PHYSIOLOGICAL AND PATHOLOGICAL CHEMISTRY.** By G. Bunge, Professor of Physiological Chemistry at Bale. Second English Edition, edited by Ernest H. Starling, M. D., F. R. S. Published, 1902, by P. Blakiston's Son & Co., Philadelphia. Price, cloth, \$3.00 net.

This is an important book and a valuable addition to the scanty literature of this interesting subject. Though some of the subject matter contained in this treatise could be found scattered about in many recent papers and monographs, yet the author has grouped and assimilated it into a compact whole, and has given to it an interpretation and a character of its own.

Concentrated within this book the student and practitioner will find all the results of the almost endless research and investigation which have been made in the important fields of biology and of chemic physiology, and the book covers in a clear way all that is known of the intricate processes of constructive and destructive metabolism. To most readers this subject is abstruse, and its advances are only to be acquired by a reading knowledge of many foreign works. For this reason, and because also of the intrinsic merit of Pro-

fessor Bunge's lectures, the book will be welcomed by all who are interested in this almost unknown field of medicine.

The object of the author in writing the book is said to have been to interest students in this important branch of medicine. This he has certainly accomplished, and the book represents much more than this, for, aside from the work of the author himself, the reader is enabled to avail himself of whatever of importance has been accomplished by physiologists the world over by means of the very full and complete bibliography which is a part of the book.

This, the second edition of Bunge's work, is a translation of the fourth German edition, and brings the present knowledge of physiologic chemistry fully up to date. The translator has done her work well, and the result is a fluent translation, clear, concise and interesting in the extreme. The book is well printed and well bound, and the price is reasonable.

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**SYSTEM OF PHYSIOLOGIC THERAPEUTICS—COHEN.** Vol. IX, Hydrotherapy, Thermotherapy, Heliotherapy, and Phototherapy by Dr. Wilhelm Winternitz, Balneology and Crounotherapy by Dr. E. Heinrich Kisch. Illustrated. Published, 1902, by P. Blakiston's Son & Co., 1012 Walnut street, Philadelphia.

The same thoroughness and completeness which has marked the other books of this series is characteristic of the present, the 9th volume. Hydrotherapy, heat, light, mineral waters, baths, etc., are treated in a most exhaustive and helpful way, and the result is a book which must prove of great practical value. The authors are men of large experience and of unbounded zeal in the several departments of which they write, and neither time nor money has been spared in preparing this volume, which, so far as we know, is the most complete treatise on these important subjects in the English language, and will prove a valuable addition to every physician's library.

The book is well illustrated and a complete index adds much to the value of a very admirable volume.

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**BLAKISTON'S QUIZ-COMPENDS—No. 18, COMPEND OF SPECIAL PATHOLOGY,** by Alfred Edward Thayer, M. D., Containing 34 Illustrations. Published, 1902, by P. Blakiston's Son & Co., Philadelphia. Price 80 cents, net.

This handy compend covers in a clear and concise way the essential principles of Special Pathology. It is a companion volume to Dr. Thayer's other compend which treats of general pathology, and the two taken

together embrace the whole groundwork of this important branch of medicine.

This book is well arranged and considers in order the following subjects: Special Pathology of the Circulatory System; the Respiratory System; the Ductless Glands; the Alimentary Canal; the Alimentary Glands; the Urinary System; the Reproductive System; the Locomotory System; the Cutaneous System; and Death by Violence and Poison.

The subject-matter is fully up to date, and a full index adds to the value of the book. The compend is judiciously illustrated though some of the cuts could be improved.

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### Selections.

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#### Operative Cure of Chronic Bright's Disease.

The proposal to treat chronic Bright's disease by operation was first made by Edebohls (*Medical Record*, Dec. 21, 1901), after he had obtained favorable results in four out of six cases, in which he had performed nephropexy for the purpose of anchoring a movable kidney in the presence of well marked chronic Bright's disease. In five of these six cases nephropexy was undertaken without any idea of favorably influencing the chronic nephritis known to exist, the indication for operation being given solely by the existence, in an aggravated degree, of the usual symptoms due to mobility of the kidney or kidneys. The effects of nephropexy upon the coexisting chronic Bright's disease, whatever they might prove to be, were simply hazarded in view of the necessity of relieving the patient of a number of intolerable symptoms. Encouraged by the permanence of the cures of chronic nephritis in earlier cases, he has during recent years performed nephropexy by preference upon patients suffering from chronic Bright's disease. This may account for the fact that among the 191 patients upon whom he has performed nephropexy, there were no less than sixteen sufferers from chronic nephritis. The results proved gratifying beyond all expectation. As none of the patients after operation received any further treatment for their chronic Bright's disease, the conclusion became inevitable that the cures and improvement obtained with practical uniformity must be ascribed to the operation itself.

In Edebohls' opinion, a practical division or classification of chronic Bright's disease is to designate as interstitial nephritis those

cases in which the gross evidences of inflammation of the connective tissues of the kidney predominate; as parenchymatous nephritis those in which the involvement of the secretory apparatus forms the salient feature, and as diffuse nephritis those inflammations of the kidney characterized by implication, in fairly equal degree, of both the parenchyma and the connective tissue of the organ.

Of the eighteen patients with chronic Bright's disease operated upon, five had right chronic interstitial nephritis; four had left chronic interstitial nephritis; four had right and left chronic interstitial nephritis; two had right and left chronic parenchymatous nephritis, and three had right and left chronic diffuse nephritis.

In fourteen of the eighteen cases, both kidneys were operated upon—in twelve instances at one sitting, and twice at two sittings. In four patients operation was performed on one kidney only, in every instance the right.

Of the four patients whose right kidney alone was operated upon, two recovered completely and remained in lasting health. It is probable, therefore, that their left kidneys were at the time of operation in perfect health. A third patient disappeared from observation. The fourth patient had her left kidney removed by another surgeon within three years after Edebohls' operation on the right. The left kidney was probably diseased at the time of operation on the right.

The left kidney alone was affected by chronic Bright's disease in four cases, the right alone in four cases, and both kidneys in nine cases, while in one case the unilateral or bilateral nature of the disease remains undetermined. In other words, the chronic nephritis affected both organs in nine cases, and one kidney only in eight cases, one case remaining doubtful.

In six of the eight cases in which the disease is recorded as unilateral, the healthy condition of the other kidney was verified at operation.

The fact that chronic Bright's disease may be unilateral in one-half, or nearly one-half, of a series of eighteen cases may come as a matter of surprise. The fact, however, well explains the chronic course of many cases of Bright's disease, and the comparatively little disturbance of health the disease sometimes occasions. The healthy kidney simply performs the eliminative work of both kidneys, and the toxemic symptoms of uremia are not manifested.



The diagnosis of chronic Bright's disease in the eighteen cases was based upon the previous history of the patient, upon the chemical and microscopical examination of the urine, and lastly, upon the critical test of actual inspection and palpation of the kidney at the time of operation. This evidence was supplemented in two cases by microscopical examination of a small piece of kidney tissue removed at operation.

The evidences of chronic Bright's disease, as revealed by operation, clinched the diagnosis beyond peradventure in all the cases. They were, in each instance, so positive and pronounced as to leave no room for doubt.

Excision of the renal capsule proper is performed as follows: The patient is placed prone upon the table, with the author's kidney air-cushion underlying and supporting the abdomen. Both kidneys are thus rendered accessible to operation without the necessity of changing the patient's position. An incision is carried from the twelfth rib to the crest of the ilium along the outer margin of the erector spinæ, without opening the sheath of that muscle. The fibers of the latissimus dorsi muscle are bluntly separated in the direction of their course, without cutting. The iliohypogastric nerve is sought for and drawn to one side or other, out of the way of harm. Division of the transversalis fascia exposes the perirenal fat. This is divided over the convexity of the kidney until the capsule proper is reached. The fatty capsule is now bluntly separated everywhere from the capsule proper, the dissection advancing on either aspect and around both poles of the kidney until the pelvis of the kidney is reached. Now and then the fatty capsule may be found so thickened and adherent, as the result of chronic perinephritis, that the scissors or knife may be required to separate it from the capsule proper. The kidney, with its capsule proper, is next lifted from its fatty capsule bed, and, if possible, delivered through the wound. The capsule proper is divided on a director along the entire length of the convex external border of the kidney and clean around the extremity of either pole. Each half of the capsule proper is, in turn, stripped from the kidney and reflected toward the pelvis until the entire surface of the kidney lies raw and denuded before the operator. In separating the capsule proper from the kidney, care must be exercised not to break or tear away parts of the kidney, which is often both very friable and very firmly connected with its capsule proper. The stripped-off capsule proper is next cut away entirely, close to its

junction with the pelvis of the kidney, and removed. Delivery of the kidney makes this otherwise difficult work easy. If the kidney cannot be delivered, the capsule proper must be entirely peeled off the kidney by the fingers in the bottom of the wound, and excised as far as possible, any remaining portion being simply reflected backward around the root of the kidney, where it will curl up and stay. The kidney is dropped back into its fatty bed and the external incision is closed. Drainage, except when the parts are extremely edematous, is dispensed with. After both kidneys have been thus operated upon, the dressings are applied and the patient is put to bed.

There has thus far been no mortality in Edebohls' operations upon the kidneys of patients affected with chronic Bright's disease. All the patients recovered from the operation, and all but two are alive today. One of the two died after an operation for ruptured tubal pregnancy, performed by another surgeon, exactly one year after operation on her kidneys; the other succumbed to a hysterectomy, also performed by another surgeon, eight years after operation on her right kidney.

Of the eight patients observed from one year to over eight years after operation, the further progress of whose cases and whose final condition fully justify the title of this paper, all are cured of their former chronic Bright's disease, and seven of them (one of the cases died from accident) remain so cured, as a result of operation on their kidney or kidneys, none of them having received further treatment of any kind after operation. They are free from all symptoms referable to the kidneys, and their urine remains permanently free of albumen and casts.

That chronic Bright's disease is curable by operation is apparently demonstrated beyond any legitimate doubt by the results obtained in these eight cases. The significance of this demonstration or proof becomes apparent when we consider both the wide prevalence of the disease and its inevitable tendency to a fatal termination, delayed though that termination may be, under any and all forms of treatment hitherto known.

Edebohls, however, does not entertain any enthusiastic hopes or expectations that chronic Bright's disease will be found to yield to surgical treatment in all cases and in all stages of the disease. When the patient is practically moribund, sufficient time may not be left for the circulatory changes in the kidneys, initiated by the

operation, to produce any good results. The first beneficial effects of operation, as indicated by the increased flow of urine, do not appear before the tenth day. The manifold complications of the advanced stages of chronic Bright's disease, many of them in themselves necessarily fatal, will also stand in the way of our saving lives, even if we succeed in curing or improving the chronic Bright's disease. A number of these complications will, in addition, prove almost prohibitive to undertaking any operation whatsoever.

The increased and adequately maintained blood-supply to the kidney established by Edebohls' operation leads, most probably, to gradual absorption of the interstitial or intertubular inflammatory products and exudates, thus freeing the tubules and glomeruli from external compression, constriction, and distortion, and permitting the re-establishment in them of a normal circulation. The result of this improved circulation in and between the tubules and glomeruli is the regenerative production of new epithelium capable of carrying on the secretory function.

Renal decapsulation is performed with the object of creating new and liberal supplies of arterial blood to the diseased kidney. Both the denuded kidney and its fatty capsule are most liberally supplied with blood-vessels; both are brought together by the operation over the whole extent of the surface of the kidney, and the necessary result must be the formation, on the most extensive scale possible, of new vascular connections between the kidney and the fatty capsule embracing it. The fibrous capsule proper forms an almost impenetrable barrier to the passage of blood-vessels between the kidney and its fatty capsule.

Cirrhosis of the liver, chronic interstitial hepatitis, one of the most frequent complications of chronic Bright's disease, has within the past three years come within the domain of surgery. The most modern development of the operation for cirrhosis of the liver embraces, as essential features, both the establishment of anastomosis between the omentum and the anterior abdominal wall, and the creation of widespread adhesions between the upper surface of the liver and the diaphragm. Both operations are performed with the object in view of relieving the portal circulation, and of thus removing one of the symptoms of the disease, the ascites. Edebohls believes that the future will show that, whereas the anastomosis between the vessels of the omentum and

abdominal wall will relieve the ascites, the establishment of broad adhesions and extensive vascular anastomosis between the upper surface of the liver and the diaphragm will accomplish more than this. It will probably lead to an amelioration, and possibly, in some instances, to a cure, of the cirrhosis itself, by establishing an increased arterial hyperemization of the liver on the same principles which underlie the operation for the cure of chronic Bright's disease. There is no good reason, at the present day, why a sufferer from both chronic Bright's disease and cirrhosis of the liver should not have the chance of life afforded by operation for both conditions.

Chronic Bright's disease is curable by operation, and the present state of our knowledge does not warrant us in accurately defining the limits beyond which operation can no longer avail. Edebohls is prepared to operate upon any patient with chronic Bright's disease who has no incurable complication, or one absolutely forbidding the administration of anesthetic, and whose probable expectation of life, without operation, is not less than a month.—*The Therapeutic Gazette*.

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#### Directions to Patients Suffering from Venereal Diseases.

Used in Dr. Gutteras' Genito-Urinary Clinic at the Post-Graduate Medical School, New York.

By COLIN LUKE BEGG, A. B., M. D., First Assistant  
in the Clinic.

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#### SYPHILIS.

1. *Syphilis* is a *contagious disease*, involving in all cases the patient's *general system*. It is usually ushered in first by a sore on the genitals; then follows headaches, pains in the bones, and eruption spreading over a large part of the body, sore throat, patches in the mouth, and sometimes loss of hair and inflammation of the eyes. Of these, with the exception of the sore on the genitals, the patches in the mouth are most contagious, and the inflammation in the eyes the most dangerous, while the most severe skin troubles, when they do occur, give rise to scars which never disappear. It must be remembered, however, that cases vary greatly in severity, and that all the above mentioned symptoms need not necessarily be present.

2. *The Cure of Syphilis* can almost always be assured in a healthy individual who will place himself in the hands of his physician and obey him implicitly. The time required for the treatment is *two years*.

After the first few months, usually almost no symptoms are noticed, but they *will probably show themselves* if the treatment be stopped.

3. *Unfavorable Cases.*—In patients suffering from tuberculosis, Bright's disease, diabetes, alcoholism, anemia, malaria, or any other constitutional disease, syphilis is usually more severe, does not lend itself so well to treatment, and the outlook for cure is not so favorable.

4. *Mercury.*—The patient should be treated by mercury, usually in the form of pills, or else rubbed into the skin in the form of an ointment. If the patient is getting too much mercury, he may have symptoms that are often worse than those of the disease itself. They are, sore gums, loose teeth, bad breath, and sometimes colicky pains and diarrhea. In such cases the patient should stop taking the medicine until the symptoms disappear, and, when he begins to take the mercury again, should take not more than three-quarters of the dose which he formerly had been taking.

5. *When to see the Doctor.*—The patient should report to the doctor if any fresh local troubles develop, or if there be any cause for worry which is not understood. In order to have his case carefully watched, as it should be, the patient should report to the doctor every week for the first three months, every two weeks for the next nine months, and every month for the second year, or oftener if the doctor so directs.

*The Contagion of Syphilis.*—The patient must be careful not to give the disease to others by kissing women and children on the mouth. He should not drink from a common cup or glass with others, nor use the same towels, scissors, or other toilet articles. The discharge from the first sore (chancre) and the saliva and discharge from the patches in the mouth and throat are the most contagious things about the patient. Therefore he should be careful to keep his fingers out of his mouth, and to wash his hands thoroughly after touching any of the contagious places. He should keep his hands clean and touch others as little as possible. He should sleep in a separate bed, and should remember that he may be a source of danger to others about him, especially during the first year after the development of the chancre. He should therefore train himself to think of this danger of contagion to others and act accordingly.

The patient should not have sexual intercourse at all during the two years of treatment. If unmarried, he should not consider marriage for at least three years after the development of the chancre. Intercourse

during these years should be considered a crime. If the patient is married, he should also abstain from intercourse with his wife, and should separate himself from her, and confess to her, in order to prevent disaster. If he infects his wife, it means that she will have to go through the disease, and that the offspring will be miscarried, or stillborn, or that the child, if brought up, will be sickly, deformed, or weak-minded, and therefore a burden to the parents as well as to the community.

7. *Care of the Body.*—The skin should be kept in good condition. Tepid baths should be taken in the morning, followed by a good rub, if no eruption be present. A hot bath should be taken every two or three days. Sometimes a hot shower, followed by a cold one, is of benefit. Turkish baths may be taken once or twice a week, if no active skin troubles be present. Patients who work in hot places, and perspire freely, can, as a rule, stand the largest amount of mercury. For the same reason more mercury can be borne in summer than in winter.

The genitals should be kept scrupulously clean, also the cleft between the thighs, and in case of the appearance of any undue moisture, irritation or an eruption on these parts they should be dusted with some bland powder and covered with a thin pad of cotton.

8. *Care of the Mouth and Teeth.*—This is very important. As soon as the patient knows that he has the disease, he should have a dentist put his teeth in order. Sharp edges should be filed down, cavities filled, and stumps pulled. The teeth should be brushed with a soft brush after each meal. Tooth powder should not be used more than once a day. Particles may be removed from the crevices between the teeth with silk floss. The mouth should be washed out after brushing the teeth with a mouth-wash, consisting of borolyptol and water.

9. *Mode of Life.*—Exercise moderately, enough to produce perspiration without tiring. Live regularly, taking meals at prescribed times. Go to bed early and sleep at least eight hours. Avoid all excesses, and do not give way to unnecessary worry. Wear flannels of varying weights, both in winter and in summer. Be careful not to expose yourself to cold or wet.

10. *What to Eat.*—The following rules for diet should be observed :

#### DIET LIST.

*Soups.*—Puree, oxtail, chicken, mock-turtle, green turtle, and vegetable soups.

*Fish.*—All fresh fish, boiled, baked, or

broiled; raw oysters; scallops (stewed), crabs and lobsters.

**Meat.**—Beef, mutton, roasted or broiled; poultry; game; lamb-chops or cutlets; eggs, soft boiled, scrambled, poached, raw or in omelettes.

**Farinaceous.**—Cracked wheat, oatmeal, mush; sago, tapioca, rice, hominy, barley, macaroni, vermicelli; whole wheat bread, stale or toasted wheat bread, brown bread, milk toast, corn bread.

**Vegetables.**—Green peas, string beans, parsnips, turnips, spinach, onions, cauliflower, mushrooms, celery, lettuce, asparagus, sweet potatoes, white potatoes in moderation, preferably baked.

**Desserts.**—Custards, rice or cornstarch puddings, blanc mangé.

**Drinks.**—Water, plain or aerated, cocoa, chocolate, milk, koumyss. At the physician's discretion a small amount of red wine with dinner, and a limited amount of coffee may be given when no active symptoms are present.

**Smoking.**—Tobacco in any form should be prohibited if there are sores in the mouth. At other times two cigars a day are allowed. Chewing tobacco, cigarettes and pipes are interdicted. Tobacco irritates the mouth and throat, and is injurious to the system.

**Avoid.**—Eating anything fried, or any pickled, salted, canned or preserved meat or fish. Avoid fruits, pickles, condiments and alcoholic drinks, tea, pork, veal, pastry and clams.

**Special Note.**—Let the animal food predominate over the starchy, and let it form part of every meal.

#### NOTE:—PREVENTION OF SYPHILIS.

In order to avoid contracting the disease avoid illicit intercourse.

Do not use soiled towels in public places for any purpose, not even wiping the hands, nor drink out of glasses or cups set for the use of the public in railroad stations, etc., unless you take the precaution not to touch the rim of the glass or cup with your lips.

#### URETHRITIS.

1. **Diet.**—Avoid all foods which give rise to irritating compounds in the urine, such as asparagus, tomatoes, rhubarb, and all sour, pickled, and spiced dishes, especially the condiments, such as pepper, peppersauce, catsup, chili sauce, etc.

2. **Drinks.**—Abstain from liquors, wines, beers, and ginger ale. Claret, when mixed with water, is the least harmful and is sometimes allowed in the later stages of the dis-

ease if the patient needs strengthening. Coffee and tea, taken moderately, do no harm, but in large quantities they increase the nervousness naturally accompanying this trouble, and increase the local nervous irritability as well. Milk between meals is beneficial if the patient's appetite is poor, or a milk diet may be advised if there are any complications which indicate it.

3. **Tobacco** may be used in moderation—about one-third of the usual amount.

4. **The bowels** should be kept open, and if there be any tendency to constipation the patient should take Seidlitz powders, or salines, such as Apenta water, citrate of magnesia, or Rochelle salts, in the morning, half an hour before breakfast.

5. In order to *keep the urine bland* and diluted, so as not to cause irritation of the diseased parts in passing, the patient should drink large quantities of water, and if there be much burning, some of the alkaline mineral waters, such as Vichy, Seltzer or Appolinaris, should be drunk.

6. **Sexual excitement** should be avoided, by abstaining from medicines containing strychnine, phosphorus, quinine or other drugs which produce sexual stimulation. Sexual intercourse should be absolutely abstained from, as by exciting the deeper portions of the genital tract it is apt to give rise to complications and would infect the woman, giving her the disease, and perhaps causing some dangerous or even fatal complications, and further, if she be with child, causing an inflammation of the child's eyes, resulting in probable blindness. Many of the diseases peculiar to women, and much suffering which women go through, are caused by infection with the gonorrheal poison.

7. **Toilet.**—Bathe the parts, night and morning, with warm water. Keep a piece of cotton over the end of the organ, held in place by the prepuce drawn over it. This is to be changed for a fresh piece each time after urinating.

Suggestion is made that the patient be instructed to provide himself with a  $\frac{1}{2}$ -oz. syringe with blunt nozzle, not the sharp-pointed which are sometimes given them by the druggists.

In case injections are prescribed, they are usually given four times daily, after urinating. The method of injection is as follows: Fill the syringe with warm water, and inject into the urethra, allowing it to escape immediately. Then fill the syringe with the injection fluid. Insert the tip of the syringe into the urethra; grasp the end

of the organ and the tip of the syringe with the forefinger of the left hand, bent in such a way as to form a ring around the former, so as not to allow any of the fluid to escape along the sides of the nozzle, as it would if the tip be grasped between the thumb and forefinger. Then press the piston slowly and steadily, forcing the fluid into the urethra, where it should be held for five minutes before it is allowed to escape.

The hands should be washed thoroughly after touching the parts, either for the purpose of urinating or injection, and care should be taken not to leave the towel where others may use it and dry their faces on it, as in this way they may introduce some of the contagion into their eyes, and thus cause an inflammation which may result in loss of the eyesight. For the same reason be careful not to touch your own eyes with your fingers before washing them.

8. *Mode of Life.*—Dress warmly and do not expose yourself unnecessarily to cold or wet. Keep the feet dry and warm and wear rubbers in rainy or stormy weather. Exercise moderately to a degree that would tend to improve the physical condition and not to overstrain or overheat. Avoid bicycle and horseback riding.

9. *Complications.*—Remember that complications may occur which are far worse than the disease itself. They usually come on after the tenth day, and are ushered in by frequency of urination and pain in the region of the rectum. If there be pain or a sense of weight in the external genitals, an Army and Navy suspensory bandage should be worn. In case of painful erections at night, take a hot bath before going to bed and immerse the organ in hot water when the erection occurs. Standing on a cold floor, or holding one leg elevated in an extended position will usually suffice to cause an erection to subside. If you suddenly find that you cannot pass your urine, you should take a hot sitz bath. If this does not produce a flow of urine, you should call a physician.

10. *Prevention of gonorrheal infection* is best brought about by abstaining from intercourse.

N. B. *Cure.*—A patient is well when there is no more discharge, when the urine shows no more shreds, and when there is no more frequency of urination nor feeling of discomfort in the parts. The patient should not drink beer or spirits, nor should he have intercourse for three weeks after the discharge has ceased, in order to avoid a recurrence.

Many men consider themselves well when the disagreeable acute symptoms have passed away, and when but a slight discharge is present. No man should discontinue treatment until his physician, after careful examination, pronounces him cured.—*The Philadelphia Med. Journal.*

#### Medical Aspects of Cholelithiasis.\*

By ROBERT B. PREBLE, M. D., Professor of Medicine in the Northwestern University Medical School, Attending Physician to the Cook County Hospital, Mercy, German and Polyclinic Hospitals, Chicago.

It will be quite impossible in the time suitable for an occasion like this to even touch upon many of the important phases of this question, and I shall therefore limit myself to those aspects which it would seem desirable to discuss before a surgical society; in other words, to consider the reasons why this disease, which ideally is a surgical one, falls so largely to the lot of the medical man. In the first place, the burden of the diagnosis is on the latter, for the surgeon rarely sees these patients first. Secondly, the medical man is the one who decides which cases shall be operated on and which shall be treated by medical means, for the great bulk of the cases do not require mechanical interference, but any case may at any moment require it and some cases from the outset of the symptoms are inappropriate for medical treatment. We must therefore consider the indications for surgical treatment, and lastly, we must briefly refer to the medical treatment of the cases in which surgical interference is unwise, either because of the mildness of the symptoms, or because of some concomitant disease, or in which mechanical means have failed to give the desired relief.

If gallstones always presented themselves under the typical picture of the gallstone colic, there would be but little difficulty in the diagnosis, but, unfortunately, the pictures are extremely diverse, so that often months or even years elapse before the diagnosis becomes clear. Frequently, however, the obscurity of the diagnosis is due to the fact that the multiformity of the symptoms is not sufficiently appreciated and the diagnosis is deferred until a paroxysm of pain is followed by jaundice. Too many are content with making a symptomatic diagnosis, such as gastralgia, hepatalgia or neuralgia.

\*Read by invitation before the Chicago Surgical Society, March 5, 1902.

For purposes of diagnosis, cases of gallstones may be conveniently divided into two groups, those with colic and those without. For sake of brevity, let us disregard the cases with paroxysmal pain and jaundice as being too manifest to require discussion and consider only the cases of pain without jaundice. Any of the diseases of any of the abdominal organs which ever cause colic may be confused with gallstone colic, and some of the diseases of the thoracic viscera and nervous system also are not rare causes for confusion. Some of these errors are easily avoided by careful and systematic examination, others are unavoidable until after the abdomen is open.

Tabes dorsalis sometimes presents a very faithful copy of gallstone colic, and I have personally seen several cases of this disease which have been operated on for gallstones. The error is easily avoided, provided only the possibility of it is remembered. Attention to the Argyll-Robertson pupil, the Romberg symptom and the knee-jerk will prevent the error. A diagnosis of gallstones in a tabetic should be made only when there is something more significant than paroxysms of pain and tenderness in the region of the gall-bladder. Jaundice following pain with a palpable gall-bladder with or without crepitus, or better still, with the demonstration of a gallstone in the feces, would warrant the diagnosis of gallstones in a tabetic. In a word, the clinical picture of gallstones must be complete and typical to warrant the diagnosis in a tabetic patient.

I have twice seen patients entered under the diagnosis of gallstone colic who had a pleurisy of the right side and nothing else. This error, like the one just mentioned, is easily avoided by an examination which is systematic and not limited to the region of the liver. Why the pain of a pleurisy should be felt over the region of the gall-bladder is not clear, but the phenomenon is probably comparable to the referred pains seen in a wide variety of diseases, for example, the neuralgia of the middle dorsal nerves of the left side, so often found with various diseases of the stomach. It, must, however, be remembered that the opposite error is also possible, that a right-sided pleurisy may be the result of gallstones. I am reminded of another possibility by a case which I saw two or three years ago with Dr. Herrick. It was a young man who gave a history of a number of febrile attacks which were reasonably interpreted as gallstone colic. Examination showed a localized pleurisy, low down anteriorly on the right

side. This was thought to be a pleurisy of the right side, secondary to a localized peritonitis from gallstone, but when the abdomen was opened it was found to be a tubercular peritonitis with pleurisy by extension through the diaphragm and not gallstones.

Lead colic sometimes leads one into an error which may be avoided by attention. The occupation of the patient is usually the key to the puzzle. The lead line along the border of the gums, rarely absent among people exposed to lead intoxication, the localization of the pain in the umbilical region and the freedom from radiating pains, together with the lack of the more characteristic symptoms of gallstones, is usually sufficient to lead to a correct diagnosis. Moreover, the bulk of the cases of lead colic occur in male patients, and it always requires a more complete picture to warrant the diagnosis of gallstones in a male than in a female. Greater difficulty will be found with the not uncommon cases of lead poisoning in patients whose occupation does not obviously expose them to lead poisoning. Here attention to the other effects of lead will be of aid, particularly the cardio-vascular, the renal and the neuritic effects.

The differentiation between gallstone colic and the pain of the *ulcus ventriculi* is usually simple, but when found difficult especial attention should be paid to the fact that the gallstone colic comes on generally with extreme suddenness in the midst of good health, while the pain of the ulcer comes on more gradually and is usually obviously influenced by the taking of food. It generally lasts a shorter time than the biliary colic, but the patients are not free from discomfort between the paroxysms as they usually are with the gallstones. Pain radiating to the right shoulder or to the right lower dorsal region speaks for gallstones, especially when followed by chill, fever and sweating. A marked increase in the hydrochloric acid in the gastric juice points to an ulcer, although a similar excess has been seen with cholelithiasis. Youth and anemia speak for the ulcer, while age and repeated pregnancies speak for the gallstones.

Far more difficult than the differentiation mentioned is that between gallstones and the indefinite conditions grouped under the purely symptomatic name of *gastralgia* or neuralgia of the stomach. The subjective symptoms of the two conditions may be identical and the physical examination be equally negative in both. The close similarity between the two is clearly proven by the frequency with which the gallstones are



diagnosed as gastralgia and less often by the opposite error. The development of a single symptom proving a disturbance of the biliary tract, such as jaundice, even the demonstration of the bile pigments in the urine or a palpable gall-bladder or continuously recurring tenderness in the region of the gall-bladder, removes the doubt, but unfortunately such symptoms are often looked for in vain. Radiation of pain to the right shoulder, chills with fever, the cause of which is not manifest, particularly in women past the mid-point of life, should suggest gallstones. Attacks of pain in the epigastrium, occurring at irregular intervals and often precipitated by psychic influences rather than by the taking of food, particularly in a neurotic patient, suggests a gastralgia. Examination of the gastric contents is often of aid in clearing away the obscurity. One should carry in mind the possibility of this confusion, and if a patient, especially a female patient, who is not a neurotic, has several attacks of epigastric pain at frequent intervals, even though there may be no jaundice, palpable gall-bladder or demonstration of gallstone in the stools, one should advise an exploratory laparotomy.

It is in such cases as these that the symptoms to which Dieulafoy applies the name of satellite symptoms are of aid in the differentiation. The gallstone cases are frequently greatly troubled by vertigo, slight or severe, fugacious or persistent, occurring either before or during the paroxysm of pain and even in some cases replacing the pain. Such attacks of vertigo are not infrequently regarded as gastric vertigo, but they rarely occur with the gastralgia. Syncope, or rather a distressing tendency to lose consciousness, is another sometimes prominent accompanying symptom.

Another of these symptoms is both an aid and a source of confusion. I refer to the chill, fever and sweat which not infrequently accompanies attacks of biliary colic. These are valuable in distinguishing the biliary colic from the renal colic and the gastralgia, with which they are said not to occur, but are a source of confusion because they are with difficulty distinguished from the bilio-septic fever resulting from infection of the bile tracts. Charcot, Pentry, Besnier and others long ago recognized two forms of fever resulting from cholelithiasis, one transient and of relatively slight importance, called by Charcot the hepatalgic fever, and the second or bilio-septic fever of serious moment. The explanation of the hepatalgic fever is unknown, but it seems probable that

it is nothing more than a mild bilio-septic fever. At any rate, I think that we are justified in saying that any patient presenting several attacks of biliary colic with febrile phenomena should be considered as having septic bile tracts and be treated accordingly.

Formerly these febrile paroxysms, simulating as they do the malaria paroxysms, were often diagnosed as malaria, an error the more easily made because there may be accompanying them no more pain in the hepatic region than malaria often causes. Today we are more liable, perhaps, to the opposite error, taking a malaria for an angiocholitis. Both errors are easily avoided by careful examination of the blood for the plasmodia and by the therapeutic test of quinin.

There are many other questions of diagnosis which might be discussed, just as those mentioned might be more fully described. However, the things which appear to me most important have been mentioned about the errors which most easily and most frequently occur.

Having decided that the patient has gallstones, we must decide whether the patient should be treated medically or surgically, and often this is much more difficult than the diagnosis. Could we adopt the idea advocated by several in the Surgical Section of the American Medical Association in 1900, namely, that the diagnosis of gallstones is, in itself, an indication for operation, there would be no need to discuss the question of surgical indications. I am glad to be able to say that the Chicago surgeons, I believe without exception, opposed so radical an idea as this. I know of no clearer demonstration of the absurdity of this position than that given by Professor Kehr. Kehr utilizes the figures of Riedel, who holds that in Germany there are 2,000,000 people with gallstones, of whom 5 per cent., or 100,000, suffer from symptoms; and of these 34,000 are in need of immediate operation. I know of no figures for America, but I am sure that every one of us has seen many cases of gallstones in which an operation could be no more justified than many of the ovariectomies done a few years ago or the hysterectomies done today.

Certain of the rules proposed by surgeons do not appeal to me at all. For example, I can see no point to Riedel's rule that one unsuccessful attack of biliary colic is an indication for an operation. By an unsuccessful attack he means one after which no calculus is found in the stools. He infers that the calculus is too big to escape and



must therefore be removed, ignoring the fact that one may have an attack of colic without gallstones and that very many stones lie quiet for years even after exciting several attacks of colic. On the other hand, Kehr's suggestion that frequently repeated successful colics are not an indication for operation seems to me to be too conservative.

For a long time I have given my students the following list of indications for surgical interference: 1, frequently repeated attacks of colic; 2, septic symptoms in a patient who has symptoms of gallstones; 3, empyema of the gall-bladder; 4, localized or generalized peritonitis; 5, persistent jaundice; 6, obstruction of the intestines; 7, fistulæ.

Let us briefly consider these. 1. Frequent attacks of colic. This is really a rather indefinite statement, for the word frequent is altogether relative. One must consider the character of the patient, the social condition and the responsibilities bearing upon her, and a variety of other factors, but to put it briefly, we may say that when the happiness or the usefulness of the patient is seriously interfered with by the attacks of colic, and when their frequency is not materially lessened by medical treatment, an operation should be performed. It does not seem to me that the success or failure of the attacks has much bearing on the question. Far more important is the bearing of the chills and fever which often enough accompany the attacks. If these symptoms are frequently repeated, operation seems to me to be indicated, even though the other signs of sepsis are wanting.

2. Septic symptoms developing in a patient suffering with gallstones. It would be superfluous to describe these symptoms even briefly, for the general symptoms do not differ from those of sepsis, wherever its point of origin. In many of these cases operation is futile, but it should be attempted, because it is impossible to distinguish before opening the abdomen between the operable and the inoperable cases. If the infection is localized in any one portion of the bile tract or the liver, the chances of success are good, while if there are multiple biliary or peribiliary abscesses, failure is certain.

3. Empyema of the gall-bladder might properly be considered under the second heading, but is placed here in conjunction with hydrops of the gall-bladder, both being subsequent to occlusion of the cystic duct. With the empyema the indication for operation is absolute, while it is not so clear with the hydrops.

4. The development of either a localized or generalized peritonitis is an indication for operation. It is not necessary to discuss here either the pathogenesis of the peritonitis or its symptoms. A generalized peritonitis is indication for immediate operation, while with the localized inflammation the indication is neither so absolute nor so urgent. The danger of the local process lies rather in its remote than in its immediate effects. The list of possible remote effects of the local peritonitis would be long, and such examples as obstinate abdominal pain, pyloric stenosis, obstruction of the intestines are sufficient for illustration.

5. Obstruction of the common duct with resulting jaundice. There can be no question of the absoluteness of this indication. The destructive changes in the liver and the intoxication of the organism as a whole with the bile make relief of the obstruction imperative. The only point for discussion is the length of time we should wait before admitting that the jaundice is permanent. If after eight or ten weeks the obstruction persists, there is little use in waiting longer, although there are numerous instances in which the obstruction was spontaneously relieved even after a much greater period than this. These cases are not desirable subjects for operation because of the hemorrhagic diathesis, often resulting from the prolonged jaundice and often requiring a preliminary treatment with gelatin or calcium chlorid to increase the coagulability of the blood.

6. Obstruction of the intestines. It is perhaps inappropriate to include this among the indications for surgical treatment, for in the great majority of cases there have been, previous to the onset of the symptoms of ileus, no symptoms of gallstones, and the case is not recognized as one of gallstones until the operation shows the cause of the obstruction. Stones large enough to cause intestinal obstruction cannot escape through the ductus choledochus and must make their way from the gall-bladder by unnatural passages, by fistulæ between the gall tracts and the intestines. The establishment of such fistulæ is accompanied by no peculiar symptoms. In 92 observations collected by Lobstein, there were but 17 in which the symptoms of the occlusion were preceded by symptoms of gallstones. Of the cases collected by Lobstein, 61 were not operated upon and 31 died; of the 31 operated upon, 19 died. These figures about agree with those of Naunyn, who states that 50 per cent. recover spontaneously. Although these figures indicate a higher mortality in those operated

upon than in those not, it is clear to my mind that all cases should receive operation as soon as their nature is recognized. If this is done, the mortality falls to a low figure.

7. Fistulæ may be established between the bile tracts and a large number of the organs. Some of these are to be regarded as beneficial, while others, such as the cutaneous fistula, are both an inconvenience and an injury and should be relieved as soon as possible by surgical means.

There has recently been an addition to the list of surgical indications, namely, the development of the fat necrosis. I have no doubt that, now that our attention has been drawn to this effect of gallstones, we will see and recognize *antemortem* a rapidly increasing number of cases. As the number increases, the clinical picture will become clearer and better characterized. When recognized the indication is imperative.

Mention might also be made of the cancer of the gall-bladder found with gallstones. The question is still open as to which causes the other, assuming that there is a casual relation between them. Should the possibility of cancer resulting from gallstones be an indication for operation? When one compares the great frequency of the stones with the infrequency of the primary cancer of the gall-bladder, there seems no reason for so radical a position. It seems to me more radical than the hysterectomy as a prophylaxis against cancer of the uterus.

Lastly, we must refer briefly to the general plan of treatment of patients who, because of the mildness of their symptoms, the presence of some other disease of more serious moment than the gallstones, or because of the failure of relief after mechanical means have been tried, are to be put on medical treatment. Let me, however, in passing, insist upon more careful attention to all the other viscera in cases of this sort than is often given. All too frequently the patient's heart or kidney is irreparably injured in the effort to relieve the gallstones and the patient left in a far worse condition than before and his life materially shortened. Look out for nephritis, myocarditis, arteriosclerosis, diabetes and lipomatosis.

So far as the medical treatment is concerned, we may dismiss as futile efforts to dissolve stones which are already formed. Calculi are not highly soluble in the test tube and anything we may give by mouth is not likely to dissolve them in the gall-bladder. If any of the various methods

which have been tried with this idea in mind have succeeded, there is no evidence to that effect. Our efforts must therefore be directed toward preventing the formation of additional stones and the relief of troublesome symptoms. With the first indication in mind, we must recall the two essential conditions for the formation of calculi, stagnation of the bile and a lithogenic catarrh of the biliary mucous membrane. We must lessen the stagnation and the inflammation of the mucous membrane. The patients should be urged to give up the sedentary life they are usually leading and take a reasonable amount of outdoor exercise. If they are wearing their clothing too tight or lacing with corset or string, they should be shown the error of their ways. Massage is often a useful adjuvant, although personally I see no use and only possible harm in efforts at massage of the liver and gall-bladder as is advocated by some. A wide variety of diets have been planned and include all sorts of extremes. The best diet is a simple, well proportioned one, taken regularly and rationally and in as small quantity as is compatible with the maintenance of nutrition. Every effort must be made to keep the gastro-intestinal tract in the best possible condition, both for the effect this has upon the stagnation of the bile and upon the catarrh of the gall-bladder. In this way the circulation through the mucous membrane is improved, favoring recovery from the existing catarrh, increasing the resistance to new infection and other causes exciting inflammation. The diet and the exercise are probably the most important factors in accomplishing these purposes, but there is also a long list of drugs which have proved themselves useful adjuvants in cases of this sort. Prominent among these are the various mineral waters and salts. Carlsbad, Epson, Glauber and others of similar character, mercurials, salicylates and the various gastro-intestinal antiseptics are all used. So far as the treatment of the colic is concerned, I think that nothing need be said except to draw attention to the danger of the formation of the morphin habit if the attacks are frequently relieved by this drug. In some cases, indeed, this gall-stone morphinism becomes an indication for operation. The truth of the matter, however, is that any patient having attacks of colic so frequently that there is any danger of morphinism, furnish in the attacks sufficient indication for the adoption of mechanical means.—*Jour. of Am. Med. Association.*

# A Contribution to the Therapeutics of Anæmic Conditions.

By DR. HERMAN METALL, Assistant Physician to the General Polyclinic, Vienna.

(Translated from the German.)

In the medical treatment of the various forms of anæmia, whether it be essential chlorosis or the so-called secondary forms arising from severe loss of blood and various diseases (tuberculosis, cancer, etc.), iron has always occupied the most prominent place. In the management of chlorosis, especially, the chief object is the administration of an adequate quantity of iron, since upon this depends the success of all treatment. As to the manner in which iron acts in anæmic conditions, that is a secondary matter. Whatever be its mode of action, it remains an empirical remedy and yet one of incontestable value.

According to the unanimous opinion of many authors, the effect of iron in chlorosis cannot be replaced by alimentation. Reinert, Klein, Immermann, Ensli, and others have shown that typical chlorosis cannot be cured in any other way, even by forced feeding. Some of them have made a series of very careful experiments for this purpose, and reached the remarkable result that during superalimentation, extending even over a number of weeks, the quantity of hæmoglobin in the blood increased scarcely a few per cent., and remained permanently at this level. That this is actually so we daily convince ourselves in cases of chlorosis in girls of the better classes. These girls, if placed on a full diet, accumulate more fat, while the chlorosis remains practically unaffected—it requires iron. The dietary therefore plays a subsidiary part in the therapy of chlorosis (Klein), and is to be regarded only as an important adjunct to the treatment.

I will now devote a few words to manganese, which is employed in combination with iron in some ferruginous preparation for the treatment of anæmia. Hannon already directed attention to this metal, which is a constituent of healthy blood, and which, besides iron, has an important bearing on the absorption of oxygen by the blood. In fact, experiments have shown that anæmic conditions are most successfully treated with iron in connection with manganese. Chalybeate medication is materially aided and promoted by the addition of manganese. Efforts have therefore been made to introduce combinations of iron and manganese into therapeutics.

After laborious attempts, Dr. Gude, chemist, succeeded in producing such an iron-manganese preparation, which is easily absorbed by the entire intestinal tract, evokes no concomitant effects, and, as is illustrated in the following histories of cases, has proved an excellent remedy for the formation of blood. The preparation referred to is Pepto-Mangan (Gude). It contains iron and manganese in an organic combination with peptone, and is a clear fluid, resembling dark red wine, of an agreeable, non-metallic, non-astringent taste.

The advantage of this preparation is that it exerts a stimulating effect upon the blood-forming organs, these being excited to greater functional activity, and that the favorable effect manifests itself even within a short time by an increased oxygenation of the blood. At the same time, this chalybeate, as already mentioned, causes no digestive disturbances and does not injure the teeth.

In regard to the daily dose of iron, Quincke maintains that it should range from 3-4 to 1 1-2 grains of Fe. Most clinicians prescribe commonly 4 grains, which considerably exceeds the maximum dose recommended by Quincke. Some of them, like Neimayer and Trousseau, give even 7 grains of metallic iron daily; hence Pepto-Mangan (Gude) should be prescribed in doses of one tablespoonful three times daily for adults, and one teaspoonful twice daily for children up to twelve years, after meals. Sour, fatty foods and red wine should be avoided during its administration. The preparation is much relished by all patients, and it is my custom to administer it to children in water, or, better, in cold milk, with the addition of sugar, in which form it is very palatable.

After this brief introduction I will describe a number of cases which have been treated by me with Pepto-Mangan:

CASE I.—Mary B., 16 years old, has complained since a week of general debility and lassitude. She is very pale and restless, has no appetite, and suffers from headache and a feeling of pressure in the stomach. She is constipated, and the menses are irregular. Diagnosis, chlorosis.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmoglobin percent.	Body Weight.	Therapy.
August 2...	2,480,000	20	49.2	Pepto-Mangan
August 9...	3,212,000	25	50	(Gude), one
August 16...	4,020,000	30	50.5	tablespoon-
August 24...	4,300,000	40	51.3	ful three
September 2...	5,000,000	50	53.4	times daily.

After a week, the appetite was good, no headache; at the end of the second week, no further disturbances; menses not painful, and lasting only three days (formerly five days). After four weeks, the patient discharged cured.

CASE II.—Anna H., 28 years old, has suffered for three years from chlorosis, with irregular menstruation, palpitation of the heart, a feeling of weakness, and occasional syncope. Physical examination showed the presence of anæmic murmurs over the heart, as well as a venous murmur; no fever or œdema.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmo-globin per cent.	Bodily Weight.	Therapy.
August 4....	3,750,000	35	55.5	Pepto-Mangan (Gude), one tablespoonful three times daily.
August 29....	4,010,000	60	57.8	
September 14	4,200,000	70	59.	

Appearance of menses after absence of 12 weeks; subjective disturbances have disappeared.

CASE III.—M. W., 16 years old, has suffered since a year from headaches, dyspnœa, tinnitus aurium, vertigo, and gastric disturbances. There was a marked pallor of the face and of the mucous membranes; systolic murmurs over the mitral and pulmonary valves, with dilatation of the heart. No fever; spleen not palpable. Diagnosis, severe chlorosis.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmo-globin per cent.	Bodily Weight.	Therapy.
August 5....	2,250,000	25	52.5	Pepto-Mangan (Gude), one tablespoonful three times daily.
August 13....	3,200,000	30	53.5	
August 16....	3,350,000	35	55.5	
August 23....	3,530,000	40	56.5	
September 1.	4,250,000	45	58.	

The subjective symptoms rapidly subsided, the appetite improved, and the stools became regular. The menses reappeared in the second week of treatment, after having been absent for a year.

CASE IV.—M. P., 15 years old. Menses absent since one-half year; always scanty. Vicarious hæmorrhages from the nose. Since three months the patient has suffered from dyspnœa, vomiting, cardiac palpitation, general weakness, headaches, feeling of dullness, and sleeplessness. Physical examination reveals anæmic murmurs, moderate dilatation of the heart, venous murmur.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmo-globin per cent.	Bodily Weight.	Therapy.
August 5....	2,400,000	20	47.	Pepto-Mangan (Gude), one tablespoonful three times daily.
August 10....	3,600,000	25	47.5	
August 16....	3,850,000	30	48.5	
August 23....	4,250,000	35	49.0	
August 31....	4,700,000	40	49.7	
September 7.	5,000,000	45	52.	
September 14	5,200,000	50	53.	

After the first week improvement set in; at the end of treatment, disappearance of all disturbances. Increase of bodily weight, 12 pounds.

CASE V.—J. K., 18 years old. Chlorosis. Anæmic murmurs, cardiac dilatation, loss of appetite, insomnia, general lassitude, and headaches.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmo-globin per cent.	Bodily Weight.	Therapy.
August 10....	2,200,000	35	52.	Pepto-Mangan (Gude), one tablespoonful three times daily.
August 24....	3,000,000	45	55.	
September 12	3,300,000	60	57.	

At the end of the first week appetite vigorous; headaches had subsided. At the end of the fourth week no disturbance of any kind.

CASE VI.—A. N., 19 years old, has suffered from chlorotic disorders since two years. Improvement occurred under a milk diet and a sojourn in the country. Since five months the patient again complains of disturbances: palpitation of the heart, lassitude, headache, vertigo, tinnitus, and constipation; anæmic murmurs and venous hum perceptible.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmo-globin per cent.	Bodily Weight.	Therapy.
August 17....	4,500,000	25	53.5	Pepto-Mangan (Gude), one tablespoonful three times daily.
August 25....	4,100,000	30	54.	
August 31....	4,000,000	35	54.5	
September 7.	3,950,000	40	56.	
September 22	4,200,000	45	57.5	

The subjective symptoms diminished after a few days. The disturbances disappeared, the appetite improved, and the stools became regular.

CASE VII.—J. R., 20 years old, has suffered from chlorosis since two years. Status præsens: General lassitude, palpitation of the heart, a feeling of pressure in the stomach, difficulty in breathing; menses

irregular, as well as dysmenorrhœa. In the last three months all the disturbances have become more intense.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmo-globin per cent.	Bodily Weight.	Therapy.
August 22. . .	4,250,000	30	52.	Pepto-Mangan (Gude), one tablespoonful three times daily.
August 26. . .	4,350,000	35	52.5	
September 5. .	5,420,000	40	53.5	
September 12 .	5,300,000	50	54.	
September 18 .	5,350,000	55	54.5	
September 27 .	5,300,000	60	55.5	

The disorders have disappeared, the appetite is good, and the bowels regular; no anæmic heart murmurs.

CASE VIII.—L. N., 19 years old, complains of headaches, cardiac palpitation, vertigo; scanty menses.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmo-globin per cent.	Bodily Weight.	Therapy.
August 28. . .	2,500,000	40	54.	Pepto-Mangan (Gude), one tablespoonful three times daily.
September 13 .	3,750,000	55	55.5	
October 1. . . .	4,300,000	70	57.	

The subjective disorders have vanished; menses more abundant.

CASE IX.—J. M., 16 years old, has suffered since two months from palpitation of the heart, dyspnoea, feelings of pressure in the stomach, vertigo, tinnitus, and headaches. There is a slight cardiac palpitation, with systolic murmurs and a venous hum. Anorexia and constipation are present. The menses have been irregular since a year.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmo-globin per cent.	Bodily Weight.	Therapy.
September 2. .	4,500,000	35	50.	Pepto-Mangan (Gude), one tablespoonful three times daily.
September 11 .	4,750,000	40	50.5	
September 20 .	4,850,000	50	51.	
September 29 .	4,950,000	55	52.	

Menses regular; bowels normal; no disturbances.

CASE X.—Z. F., 30 years old, had a miscarriage two weeks previously, with profuse hemorrhage. After a month's treatment completely restored to health, and an increase of weight of four pounds.

CASE XI.—A. N., 6 years old; rachitis and anæmia. Under treatment an increase of weight of two-thirds of a pound. Much better appearance.

CASE XII.—J. W., 30 years old. Pulmonary tuberculosis and anæmia. After

two weeks' administration of Pepto-Mangan (Gude), an increase in weight of two pounds and an increase in hæmoglobin of fifteen per cent.

CASE XIII.—K. L., 50 years old. Cancer of the stomach, cachexia and anæmia. During three weeks' use of Pepto-Mangan (Gude), the patient felt better, the appetite had improved, and there was an increase of weight of two-thirds of a pound.

CASE XIV.—A. B., 14 years old. Chlorosis; hæmoglobin 40 per cent. After two weeks' treatment, hæmoglobin 85 per cent.; disappearance of all disturbances.

CASE XV.—F. K., 18 years old. Chlorosis; hæmoglobin 35 per cent.; after two weeks' treatment, 50 per cent.

CASE XVI.—E. J., 5 years old. Anæmia following scarlatina. After eight days' treatment with Pepto-Mangan (Gude), the patient developed a vigorous appetite, and recovered so rapidly that he could be discharged cured at the end of the second week.

Altogether, twenty-three cases of anæmia were treated with Pepto-Mangan (Gude), of which twelve showed a normal hæmoglobin per cent. of the blood after fourteen days, five after three weeks, and five after a month. On the other hand, one of the patients, who had hereditary trouble (her father having suffered from pulmonary disease), was discharged only improved, the blood, after two months' treatment with Pepto-Mangan (Gude), showing only an increase of hæmoglobin to 75 per cent. This was probably a case of tuberculosis which simulated an obstinate or severe chlorosis at its beginning.

Furthermore, two cases of acute anæmia after profuse hemorrhages were treated with Pepto-Mangan (Gude). A favorable result was obtained as early as the end of the first week. In one instance the patient felt so well that only the fear of further hemorrhage constrained him to stay in bed for another week. In the case of three women who had miscarried during the early months of pregnancy, and were making a very slow recovery from the resulting anæmia, I was able to obtain a complete recovery after four weeks' administration of Pepto-Mangan (Gude). In six other instances of weakness and anæmia following acute and chronic disease (tuberculosis, carcinoma, scarlet fever, etc.), a disappearance of the feeling of weakness and a considerable improvement of the general health could be observed in every instance.

The histories cited above will afford con-

clusive evidence of the high therapeutic value of Pepto-Mangan (Gude). Unpleasant concomitant effects and disagreeable sequels were *never* observed during the use of the remedy. Eructations, pressure in the stomach and nausea were never noticed.

In conclusion, I would say that Pepto-Mangan (Gude) is a valuable and reliable blood-building remedy, which can be recommended for general use in appropriate cases.—*Medicinisch-Chirurgisches Central-Blatt.*

#### Contributions to Practical Therapeutics.\*

By ALBERT C. BARNES, A. M., M. D., late of Pharmacologic Institute, University of Heidelberg; member of American Therapeutic Society, American Medical Association, etc., and HERMANN HILLE, PH. D., late of Chemic Institute, Heidelberg; formerly Assistant in Physiologic Chemistry, University of Würzburg, of Philadelphia.

During the past eight years we have been engaged constantly in original research work in chemistry and experimental therapeutics in America and at the Universities of Würzburg, Berlin and Heidelberg. The results of this work, notably that done at Heidelberg, have been published in German Scientific journals† whose pages are reserved for the record of original experimental investigations, conducted principally in the laboratories of European universities. Most of our work has been of a purely scientific character, but nevertheless interesting to the modern physician. For instance, we have shown for the first time the exact location of the convulsion center; suggested and proved practically that cocaine is the most rational antidote in cases of morphin poisoning (since corroborated by Professor Reichert, of the University of Pennsylvania), and have shown that the urea group of bodies may be produced synthetically by new and original methods; this last mentioned work was suggested to us by Dr. Th. Curtius, professor of chemistry at the University of Heidelberg, and was carried out in his laboratories.

The object of this communication is to call the attention of the medical profession to four new synthetic compounds (produced, for the first time by ourselves), which after extensive clinical tests in the United States and Europe have proved to be of more than ordinary practical value in the treatment of disease. In accordance with the code of ethics of the medical profes-

sion we have refrained from patenting these products, and they are, therefore, eligible to incorporation into the United States Pharmacopeia as official standard remedies.

The chemic methods of production of these compounds have been published by us in detail in various journals, but the essential features of them are herewith presented.

*A Substitute for Silver Nitrate.*—This compound, which is chemically silver vitellin (a dark brown powder), contains 30 per cent. of silver—twice the quantity in any silver proteid heretofore produced; the significance of this fact is apparant when it is recalled that the therapeutic value of a silver compound depends upon its silver content, i. e., the greater the amount of silver the greater its therapeutic value.

Silver vitellin does not precipitate albumen or sodium chlorid, hence it differs from silver nitrate in that it has no coagulating effect upon mucous membranes and is not chemically changed by their secretions. A further advantage of silver vitellin over silver nitrate is that the action of the latter is confined to the surface of mucous membranes, whereas silver vitellin has an intensely penetrating action (without causticity or irritation), whereby the antiseptic effects of silver are exerted deep into the sub-mucous structures, where, as is well known, gonococci and other pathogenic organisms find and maintain a lodgment in spite of energetic measures to eradicate them. That silver vitellin possesses this penetrating action to a much greater degree than any other agent may be easily proved by immersing a thick strand of catgut in a solution of silver vitellin for a few hours, after which, upon cutting the catgut, it is seen to be impregnated through and through with the silver.

Clinical results indicate that silver vitellin will replace the other silver compounds in the treatment of gonorrhea, and in diseases of the eye, nose and throat. In forty cases of gonorrhea treated at the University Hospital by Dr. H. M. Christian, surgeon-in-chief of the genito-urinary department, cessation of discharge was obtained in fifteen cases within ten days. Although the strength of the solution employed was as high as five per cent., in no instance did it produce irritation, but was of distinct value from the start in allaying inflammation, diminishing the discharge, reducing the number of gonococci and shortening the duration of the disease. Dr. Geo. Knowles Swinburne, of New York, treated sixty-six cases of gonorrhea at the Good Samaritan Dispensary with our silver compound.

\* Presented at the third annual meeting of American Therapeutic Society, May 14, 1902, at New York.

† Jour. für prak. chemie.

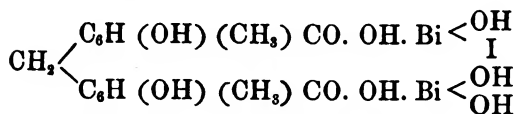
Archiv für exper. Path. und Pharmacol.



Dr. Swinburne states: "In sixty-four of these cases unpleasant symptoms were done away with entirely, the amount of discharge was markedly diminished from the start, the gonococci were reduced in number, and the course of the disease shortened; the silver solution is not in the least degree irritating." A similar trial of our silver compound was made by Dr. Edward Martin, professor of clinical surgery, University of Pennsylvania. Professor Martin authorizes us to quote him as follows: "I consider your silver preparation the best I have ever used; it is remarkably effective and absolutely non-irritating." In the above cases the strength of the silver solution used was from one to five per cent. by hand injections, deep instillation or irrigation. Complications, such as swelled testicle, bubo, etc., never occurred, and the symptoms of inflammation—pain, chordee, *ardor urinae*, etc., were completely controlled by the injections. It was also used, in strength of one to 1,000, for irrigating the bladder in cases of cystitis, with excellent results.

The solubility of silver vitellin is remarkable—one ounce of it is completely soluble in less than a dessertspoonful of water; consequently, it may be employed in solution in any desired strength. Because of its non-caustic, non-irritating and deeply penetrating action, and because of its high content of silver (nearly one-half that of silver nitrate), it is safe to predict that silver vitellin will revolutionize the treatment of many inflammatory diseases of the eye; indeed, clinical tests thus far made in cases of ophthalmia neonatorum, purulent conjunctivitis, dacryocystitis, etc., bespeak for silver vitellin a unique field in ophthalmology.

**A New Dry Surgical Dressing.**—This compound, which is a dusting powder, is chemically mono-iodid-di-bismuth-methylene-di-cresotinate and has the formula



This body is a pink, impalpable, odorless, tasteless and insoluble powder containing forty-five per cent. of bismuth, fifteen per cent. of iodine and three per cent. of formaldehyd in definite chemic combination.

It is a well known chemic law that when iodine and formaldehyd are combined, as they are in this compound, the iodine and formaldehyd are *gradually* set free by the chemic and physical conditions present on wound

surfaces; this fact is easily demonstrable experimentally and clinically.

The effects of this compound on a wound surface are those of bismuth, iodine, formaldehyd and cresotinic acid, i. e., antiseptic astringent-dessicating and granulation-producing.

For the past year the clinical effects of the powder have been studied at various hospitals in Philadelphia, New York, London, Berlin and Munich as a primary dressing after operations, and in the general class of out-patient surgical cases in which are present active inflammatory processes accompanied by disorganization of tissue and excessive discharges. In the post-operative cases, union by adhesion was the uniform rule. The employment of the powder in infected wounds (burns, scalds, abscesses, suppurating surfaces, leg ulcers, etc.) showed remarkable effects in checking pus formation, secretions and in promoting granulation and cicatrization.

At the out-patient department of the Pennsylvania Hospital, where the powder has been tried side by side with iodoform, aristol and several other dusting powders, it was noted our compound uniformly cleans a wound better than any of the others, has an equal if not greater influence upon granulation and induces more rapid healing. In no case have toxic effects of any kind resulted, nor has it been necessary to discontinue its use because of disagreeable symptoms. The powder is absolutely non-toxic, used externally or administered internally to dogs, in doses of thirty grains three times daily.

**An Easily Assimilable Organic Iron.**—This iron compound, which we designate, tentatively, iron vitellin, has the elementary percentage formula  $\text{C}_{47.51}\text{H}_{1.1}\text{N}_{17.14}\text{Fe}_3\text{S}_3\text{O}_{21.43}$ ; it is a red powder, freely and completely soluble in water, forming a beautiful clear red solution, neutral in reaction, tasteless and odorless.

Practically all of the so-called "organic" iron compounds heretofore produced synthetically are nothing more than simple combinations of iron salts with albuminoids; that this is true of ferratin, iron peptonate and the large number of similar preparations may be readily proved by the addition of a solution of silver nitrate, which reagent precipitates albuminoids. With our iron compound, however, silver nitrate causes no precipitation.

Now, a few words as to the meaning of the term "organic iron": This designation, all authorities assert, should be restricted



to those compounds in which the characteristic iron tests are not produced by certain reagents. The most reliable and the most delicate of these tests is what is known as MacCallum's, and consists in adding a small quantity of a one-half per cent. solution of hematoxylin to the iron to be tested; if the iron is *inorganic*, a characteristic blue-black color is produced, while if the iron is *organic*, no color reaction results. This test applied to the best known of these alleged "organic" iron compounds produces the characteristic hematoxylin reaction for inorganic iron; on the other hand, our iron compound does not yield this reaction, so that it is in the most accurate scientific sense a true organic iron.

Authorities teach that organic iron has, by reason of its chemic construction, the following clinical advantages over inorganic iron: It cannot provoke digestive disturbance, is not astringent, is more readily assimilated, and is in the complex form required by the tissues.

Our iron compound further differentiates itself from ferratin, iron peptonate, etc., by the fact that it is not decomposed in the stomach. Digestion of our iron compound with an artificial gastric juice for four hours at body temperature fails to split off even a trace of iron; hence it cannot be astringent or irritating to the gastric mucous membrane as are the other compounds.

The greater facility with which iron vitellin, compared to Bland's mass, iron peptonate, etc., is assimilated, we have demonstrated by animal experiments; there is three times more of iron vitellin absorbed and stored in the liver than of the usually employed forms of iron.

Clinical experiments with iron vitellin have been made by several physicians in private practice and at the medical outpatient departments of the University and Polyclinic Hospitals, the detailed records of which will be published elsewhere. In eight cases of severe chlorosis, two of secondary anemia and two of primary anemia, due to diminution of the total quantity of blood, restoration of normal conditions occurred in from ten days to six weeks. To quote from the hospital records made: "Physically the patients were improved, and with the increase in appetite felt better and more buoyant, and the clinical results are, on the whole, better than those obtained from any other form of iron."

A summary of the results obtained thus far indicate that the advantages of iron vitellin over Bland's mass, iron peptonate,

etc., consist of its more easy assimilation, its freedom from digestive disturbances, and its greater general beneficial influences upon the signs and subjective symptoms of blood impoverishment.

*An Intestinal Antiseptic and Astringent.*—This is hexamethylenetetramin tannin proteid and contains fifty per cent. of tannin and ten per cent. of hexamethylenetetramin in definite chemic combination. It is a well established fact that tannin is one of the best intestinal astringents available, if it can be so combined that it passes out of the stomach into the intestines chemically unchanged and gradually releases free tannin by contact with the alkaline intestinal contents. As pointed out by Professor Nicolaier, of Göttingen, and more recently by Loebisch, of Innsbruck, hexamethylenetetramin exercises potent inhibitory influences upon intestinal putrefaction and that under its influence indican, the acknowledged index of intestinal decomposition, disappears from the urine.

Clinicians have availed themselves of the use of this drug in cases of typhoid fever, because it sterilizes the urine to the extent of complete disappearance of typhoid bacilli from that fluid.

The essential feature of our compound is that it so combines a monotoxic antiseptic and astringent that the compound is uninfluenced by the gastric juice, but is gradually split up into its components as it passes downward through the intestines; hence it cannot disturb the stomach and it exercises antiseptic and astringent properties in the lower part of the intestinal canal—facts easily demonstrable experimentally and clinically.

This remedy has proved of marked value in a large series of cases of acute catarrhal enteritis, chronic diarrhea due to lesions in both the small and large intestine and in infantile diarrhea; it produces prompt cessation of bowel movements and relief from symptoms of inflammation. Its inhibitory influence upon intestinal putrefaction was established by careful observations in severe cases of typhoid fever in the Philadelphia Hospital, in which it was noted that after the administration of several one-gram doses of the drug, indican, which had previously been present in large quantities, disappeared completely from the urine.

The field of application of this compound is typhoid fever and inflammatory diseases of the intestines, associated with diarrhea and the symptoms of autointoxication dependent upon intestinal putrefaction. Hexa-

methylenetetramin tannin proteid is a yellowish-brown, fine powder, which is odorless and tasteless.

All of the above compounds are the results of long and careful detailed study of the laws of the relationship between chemic construction and therapeutic activity; all of them are of the scientific character which entitle them to official recognition in the Pharmacopoeia. Inasmuch as these products fulfill acknowledged desiderata in therapeutics and embody clearly demonstrable advantages over remedies for similar purposes now available, they constitute material contributions to the progress of medical science.—*American Medicine*.

### Conduct of the Physician in the Sick-Room.

By A. W. REESE, A. M., M. D., Warrensburg, Mo.

The arena for the exercise of medical talents is at the bedside of the sick. The clinical field is the supreme test wherein the physician is "weighed in the balance," and thrice blessed is he who, emerging from this ordeal, is not "found wanting." It is here that practical knowledge is the only sort of education that is of any value. It is here that tact, judgment and therapeutic skill are what is most needed. A man may be ever so learned in the literature of the profession, he may have mastered all its fundamental principles, he may even sit in the honored chair of a professor, his head may be "chock full" of the beautiful theories upon which science is largely built, and yet he may lack the essential qualifications of the successful practitioner of the "healing art."

It takes a good many qualities to make a skillful and successful physician. Chief among these is good, sound, hard common sense. This is the chief "corner-stone" upon which a medical reputation must be built. There is not so much difference between educated physicians, in this day and age, as the general public is often led to suppose. So far as actual knowledge of the principles of the science of medicine is concerned, it would be hard to discriminate between the reputable members of the profession.

While a medical college may have the full power to confer the degree of M. D. upon its students, it certainly cannot supply them with the native talent, tact, judgment and skill that are so essential to professional success. But, taking it for granted that he is in possession of the medical learning and native talent required to establish his reputation with the profession, as well as with

the general public, the question arises, what are his duties and how shall he conduct himself in the sick-room? Upon the very threshold of this investigation we would reply that, in addition to the qualifications already named, he must be a gentleman.

The physician who possesses this noble quality is, upon the very onset of his professional career, far advanced along the shining highway of success. The man who is not by nature a true gentleman, with all that the word implies, has no business in the ranks of the profession. The physician should be a man of hopeful temperament, and of a cheerful disposition. These qualities are of inestimable value in the sick-room. A pleasant smile, a word of encouragement, will often do his patient more good than a legion of pills. The physician must be dignified in his manners. A doctor who is a clown or a "hail fellow! well met!" with everybody, Thomas, Richard and Henry, never secures the respect of the public, and but seldom has the confidence of his patient.

The physician should never forget the fact that "there is a divinity that doth hedge a king." In his relation to the sick the doctor must be a man of authority. His opinion and his word must be law. He must be an autocrat. He must be positive and firm in his administration. He should, under no circumstance whatever, be influenced in his therapeutic measures by the suggestions of laymen, whatever of general intelligence these persons may possess. Every physician in his daily work often meets these "smart Alecks," who, with a very little smattering of medical knowledge, are ready to thrust themselves into the conflict with all the brass and assurance this class invariably possess.

"Fools rush in where angels fear to tread."

The physician must promptly and unhesitatingly sit down on all these fellows. If he deliberate he is lost. If he adopt any therapeutic measure offered by this class and the patient recover, then the lay prescription gets the credit, and the faithful physician, who has so nobly "borne the heat and burden of the day," is relegated to the "tomb of the Capulets." He gets no thanks and is often grudgingly paid, if paid at all. Beware of this rock upon which untold thousands have been wrecked.

The physician should waste no time in the sick-room explaining his treatment to the patient or to his friends. He should never divulge the nature of his remedies. The less the patient knows about these the better. The whole secret of homeopathy in its pop-

ular success is in its mystery. In this respect truly the disciples of Hahnemann are "wiser than the children of light." Explanations can do no good, and very often do exceeding harm.

The physician, above all others, should be a man of great prudence. He should be very careful not to repeat what he sees or hears in a sick-room. The first thing a medical student ought to learn is to keep his mouth shut! The physician should never be a gossip. The confidences reposed in a physician are sacred. The doctor who forgets this and allows himself to be indiscreet in his conversation may set a whole community together by the ears. Policy, if no higher motive, should prevent this.

Where female patients are concerned, great caution and circumspection are in demand. The physician should be delicate and modest in all his relations to them. Private interviews should be avoided as much as possible. Anesthetics should never be administered to a woman without the presence of a witness. Some damage suits might have been prevented and a few lives saved had this precaution always been strictly observed.

In obstetric practice the physician is admitted to the closest and most sacred professional relations with the patient. He has here the opportunity of securing her unbounded confidence, gratitude and respect. A woman is far more grateful to the physician who affords her relief in sickness than any man ever is or can be. Hence the physician is very short-sighted, indeed, who does not make his female patients his everlasting friends. A good woman is the noblest work of God, and is the doctor's best friend.

The lying-in chamber differs in many respects from other sick-rooms. It is often a scene of pleasantries rather than otherwise. This is especially the case in the "rural districts." The country doctor not infrequently meets in the parturient chamber a lot of nice old ladies—neighbors or relatives of the patient—who are sometimes led to indulge in rather questionable jokes at the expense of the "sick" woman, with a view to "jolly her up" and to prevent her getting "low spirited."

Now, right here comes in a great temptation to the doctor, more especially if he be of a humorous turn of mind, to "chip in" and join the dear old ladies in their fun. But, doctor, don't you do it, if you value your future practice in this line. Let the good

old ladies "crack their jokes"; it is their privilege on occasions like this, but it will not do for the doctor to indulge in this questionable sport.

Some timid young wife, modest and shy, approaching maternity may hear of the doctor's "joke," and it will create disgust in her mind, and, except in dire necessity, she will refuse to have the witty (?) doctor at her bedside in the hour when she is to become a mother.

The doctor should be neat and clean in his person. This is essential in the sick-room. Patients have delicate sensibilities and acute perceptions. A doctor coming into their presence smelling loudly of whisky or tobacco is an "object lesson" not likely to be soothing to their nerves. The doctor's breath should be odorless, likewise his body, the latter being procured by means of daily baths in pure water and the use of pure soap.

Avoid perfumery. It is disagreeable to the sick, as well as to some other people not requiring the services of a doctor.

The physician should be neat in his dress. This makes a good impression, not only on the sick, but on all other people of refined and cultured tastes. The doctor's linen should always be immaculate in its purity. A doctor who is careless or "dowdy" in this respect cannot fail to make a bad impression in the sick-room and everywhere else. Nothing is more becoming to a physician or more professional than a neatly-fitting suit of black, made of the best material in the shop. Such a costume fills every demand, and is suitable for any and all occasions.

In all clinical examinations of women, the utmost respect for female modesty should be strictly observed. No exposures of the person should be made except such as are absolutely and imperatively demanded in the interests of science in order to arrive at a correct diagnosis of the case. The physician who pursues this wise and judicious course will have no difficulty in securing any sort of clinical examination he may require, even from the most fastidious and modest woman.

When the physician has made out a correct diagnosis, written his prescription, given the necessary instructions to the attendants and nurses, has seen that proper ventilation of the invalid chamber is secured, has given orders as to the patient's diet, and such other minor details as may suggest themselves to his mind, his duty in the sick-room is at an end.—*St. Louis Hospital Bulletin.*

### Substitution and Dishonesty.

There are dishonest men in every profession and in all walks of life. There are men who would rob a bank or steal a button, and there are druggists who, for a paltry gain, would rob a sick person of his only chance of health or even life. And more than that. For that same paltry profit they would injure the standing of the manufacturer who places upon the market a reliable drug of known strength and purity, and the reputation of the physician who prescribes it.

The substitution of cheap and inferior drugs by unscrupulous pharmacists is not a thing of today or yesterday. The evil has long existed, but it has grown to such alarming proportions that a general protest has arisen against it throughout the entire country. In the state of Tennessee a law was passed during the present year making it "unlawful for any corporation, firm or person, or any combination or association of corporations, firms or persons engaged in the business of buying, compounding and selling drugs and medicines to substitute any drug or medicine in lieu or instead of that given to the patient by the physician on the face of his prescription."

In this city a practically identical law has long been on the statute books. It is found in Sec. 401 of the Penal Code, and reads as follows:

"An apothecary, or druggist, or a person employed as clerk or salesman by an apothecary or druggist, or otherwise carrying on business as a dealer in drugs or medicines, who, in putting up any drugs or medicines, or making up any prescription, or filling any order for drugs or medicines, wilfully, negligently or ignorantly omits to label the same, or puts any untrue label, stamp or other designation of contents upon any box, bottle or other package containing a drug or medicine, or substitutes a different article for any article prescribed or ordered, or puts up a greater or less quantity of any article than that prescribed or ordered, or otherwise deviates from the terms of the prescription or order which he undertakes to follow, in consequence of which human life or health is endangered, is guilty of a misdemeanor."

Laws of this kind are excellent in their intent, and similar ones should be enacted in other communities. This can no doubt be done if the various medical societies will interest themselves in the subject. It will never count for anything if the basis on which they work is that of a loss of practice, nor will it avail anything by an argument

endeavoring to prove that the manufacturer is injured. This would appear as asking for class legislation, and as such would receive no sincere attention at the hands of those who make our laws. We have laws against substitution of food products, and the hands of the people are held up in horror at that which is seemingly a very great evil. A man might purchase a loaf of bread, adulterated, and constitutionally receive little or no injury, unless the same was partaken of for a long space of time. An inferior brand of whiskey or an adulterated glass of beer would not of itself work any great injury, unless the same was continued indefinitely. On the other hand, the substitution of one ingredient for another in a prescription administered to a sick individual might cause death, and therefore substitution on a prescription written by an intelligent physician, after long years of study and research, should be regarded as criminal. In a recent case of death from poisoning, the druggist who gave the wrong medicine offered as an excuse that he had merely substituted one article for another on the supposition that it was of equal strength and much cheaper.

The mere enactment of such laws is not all that is necessary. Committees should be appointed by the various medical societies—and we have no doubt that manufacturers of reputable drug preparations will gladly co-operate with them—for the purpose of collecting evidence against guilty parties and seeing that they are punished, just as illegal practitioners of medicine and unlicensed pharmacists are now sought out and prosecuted.

Another remedy for substitution lies in the hands of the physician himself, and he is, in a certain measure, responsible for the existence of this evil. If physicians would take the time and trouble to ascertain just what they want, and then insist upon the druggist supplying that article, there would soon be little complaint from this source. Let him send his patients to reliable druggists, who will fill prescriptions exactly as written. If concerted action were taken along this line, it would soon bring the dishonest "substitutor" to his senses, and he would realize that "honesty is the best policy" in the drug business, as it is in other lines of trade.

Another suggestion that has been made is that every physician should keep on hand a stock of his own particular remedies and thus make himself independent of the retailing druggist. This is not always practicable nor desirable. The busy practitioner has

quite enough to do without burdening himself with shelves of drugs and dispensing the same.

Continual harping on substitution by the medical journals undoubtedly is of value, but it does not impress upon the practitioner any idea of the extent to which this nefarious practice is carried on, and it is a difficult matter to decide just what method to pursue in order to place the stigma where it belongs.—*The Medical Examiner and Practitioner*.

### The Preventive and Curative Treatment of Hay Fever.

It is difficult to conceive of a more miserable creature in all the world than the hay fever sufferer. The attack not only makes him exceedingly uncomfortable, but renders him unfit for business or the pleasures of society. Aside from the annoying and continual discharge from the nostrils, the eyes are suffused, the secretion of tears is increased, the nasal passages are obstructed, and an intense burning sensation is experienced. The latter is not entirely limited to the mucous membranes, but not infrequently involves the cutaneous surfaces of the forehead, cheeks and nose. Violent attacks of sneezing occur, which are so prolonged, at times, as to completely exhaust the sufferer and bring on severe headache. The condition is one of utter wretchedness, and there is extreme malaise, amounting occasionally to complete prostration. The lightest duties become irksome tasks, and many an active, industrious, and useful member of society is completely incapacitated while "the season" lasts.

For years some convenient means of relief has been sought. Change of scene does very well for those, unfettered by business, who can afford to travel. But to many very worthy people a change of scene is out of the question. Naturally the greater number of the afflicted are accustomed to look to the medical profession for the help they need. But what has the medical profession actually accomplished for the permanent relief of the sufferer or the cure of his ailment? There is scarcely a sedative, astringent, tonic, nerve, or alterative drug in the materia medica that has not enjoyed an evanescent reputation as a useful remedy in the treatment of hay fever. Until the discovery of Adrenalin, each had been as much of a disappointment as its predecessor, and none had afforded more than the merest temporary relief.

There is increasing evidence that Adrena-

lin fully meets the indications as a remedial agent in hay fever. It controls the nasal discharge, allays congestion of the mucous membranes, and in that manner reduces the swelling of the turbinal tissues. As the nasal obstruction disappears, natural breathing is materially aided and the ungovernable desire to sneeze is mitigated. In short, a season of comparative comfort takes the place of the former condition of distress and unrest. Adrenalin blanches the mucous membrane by vigorously contracting the capillaries, and thus reduces local turgescence. It strengthens the heart and overcomes the sense of malaise, so frequently a prominent feature in cases of long standing.

In the treatment of hay fever the Solution of Adrenalin Chloride should be used. This preparation is supplied in the strength of one part Adrenalin Chloride to one-thousand parts Normal Saline Solution, and is preserved by the addition of 0.5 per cent. Chlorotone. The 1-1000 solution should be diluted by the addition of four parts Normal Salt Solution, and sprayed into the nares with a "Cocaine" atomizer. In the office, the 1-1000 solution may be applied in full strength. A small pledget of cotton is wrapped about the end of an applicator and moistened with a few drops of the solution (1:1000). The speculum is then introduced, the patient's head is tilted backward in a position most favorable for thorough illumination by the head-mirror, and the visible portions of the lower and middle turbinate bodies, and the septum, are carefully and thoroughly brushed. The same application is made to the other nostril, when usually relief follows in a few moments. Should the benefit prove only partial, the 1-5000 solution may now be sprayed into both nares, and a few drops instilled into both eyes. The effect of this treatment may be expected to last for several hours. Indeed some physicians report that it is necessary to make but one thorough application daily to afford complete relief.

It is also recommended that Solution Adrenalin Chloride be administered internally in 5- to 10-drop doses, beginning ten days to two weeks prior to the expected attack. In explanation of the beneficial effect of the drug when used in this manner, the suggestion has been made that hay fever is essentially a neurosis, characterized by a local vaso-motor paralysis, affecting the blood supply of the eyes, nose, face, and pharynx, and occasionally of the laryngeal and bronchial mucous membranes. Adrenalin overcomes this condition, restores the normal bal-

ance in the local blood pressure, and thus aids in bringing about a cure. The profession is to be congratulated that it has at last an agent that, if not a specific, fulfills the therapeutic indications more completely and with greater satisfaction than any other remedial measure recorded in the history of medicine.

#### Divorce Reform.

The need for more stringent divorce laws was illustrated again Wednesday with the publication of the additional bills granted in the Supreme Court. There were thirty-two of these divorces granted, and very few of them were called for, probably, by the welfare of the community. Eighteen, more than half of the divorces, were secured because of alleged cruel and abusive treatment, and nine were for utter desertion, making a total of twenty-seven out of the thirty-two for reasons that might be, for the most part at least, controlled by the criminal arm of the law. If a man abuses the wife of his bosom, or if per contra the wife abuses the husband she has promised to love, cherish and obey, there is a means of stopping it without the dissolution of the marriage bond. Cruel and abusive treatment which is clearly proven and is of such a character as to warrant the granting of a divorce at the hand of any judge of our Supreme Court would be amenable to the law, and the party guilty of such an offense deserves rather to be haled before Judge Hill and roundly punished for his crime than to be liberated from his marriage bond, in many cases the very end sought for. In most cases persons wanted by the executors of our criminal law for infractions of the statutes are easily overhauled and brought back to answer for their misdemeanors. Desertion of a wife should be a misdemeanor, and the officers should strive as actively to bring a man back to his duty in this regard as they would if he were a fugitive from justice for other cause. Nor would it be difficult for the law to deal with a man who failed to support his wife and family, thus removing two more of the cases for which divorce was granted at the recent term. If it were more difficult for divorce to be secured, many men and women would be prevented from rushing hastily into the married state and the necessity for divorce would be correspondingly decreased.—*Portland, Me., Evening Express.*

#### Sanitary Reforms in Cuba.

It will be interesting to compare the health statistics of the island of Cuba, and particularly of the city of Havana, under strictly Cuban administration, with those which gave the results of the sanitary administration of the Cuban capital by Major Gorgas, surgeon, U. S. A., and those working under his direction. The deaths in Havana from the leading zymotic diseases were in the year 1901 the lowest ever recorded. Tuberculosis, malaria, typhoid fever, diphtheria and smallpox were kept in their ravages within unaccustomed bounds. But the most marked success was the triumph over yellow fever, a disease which for more than two centuries had led, on the average, to the death, in Havana, of more than 750 people a year, this mortality rising in certain instances to over 2,000 people in a year, and this in times past, when the city had fewer citizens than are now numbered as its population. The total number of deaths from yellow fever in Havana in the year 1901 was 18, and for six months out of the year no deaths were recorded. It has been pointed out that this wonderfully preventive result is a triumph due, not only to vivisection, but even to what may be fairly termed human vivisection; that is, in order to demonstrate that the mosquitoes really carried the germs of disease, a number of non-immune persons volunteered to permit themselves to be bitten by mosquitoes that had previously stung persons who had yellow fever. These experiments demonstrated in an unmistakable manner that the disease was transmitted in this way, and this fact having been established led to the adoption of means of preventing its further extension. One potent reason for our participating in Cuban affairs was the wish on the part of a great many people of the South to prevent Cuba from continuing to be a plague spot from which disease was brought across to the main continent. Our sanitary administrators have shown not only that it is possible to make and keep Cuba a healthy place, if proper precautions are taken, but that the dreaded disease may be prevented from establishing itself on the territory of the United States by the employment of those methods which have proved so effective in the city of Havana.—*The Boston Herald.*

The trouble with most of us is not so much that we have a hard row to hoe, but that we dislike hoeing.—*Puck.*



### Syphilis and Sin.

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Those who are inclined to sneer at any casual relation between the relationship of *malum* and *morbus*, between inethical conduct and the spread of disease, should read the monograph of Dr. Bloch on the origin of syphilis. Since the introduction of the disease into Europe, in 1493, and its dissemination in a few years over the entire European and Oriental world, the deaths, suffering and expense due to it are incomprehensible and appalling. Centuries of crime, lasciviousness and cruelty were needed to bring together such men as composed the crews of Columbus, the army of Charles VIII, and such women as helped them to scatter the poison throughout the world. Bloch shows that the disease among the naked savages of the West Indies was comparatively harmless, but to the whites of Spain, Italy and Europe it was intensely virulent and fatal. Uncontrolled lust, both of the flesh and of power, was plainly the *sine qua non* of the terrible experience with syphilis, from which the world has suffered for 400 years. Unnecessary war, the receiving from savage or semi-civilized peoples their vices, or taking to them our own—these are things that bring strange and unexpected punishments. Every physician has a voice in the affairs of his country, and every physician who seeks to prevent disease must seek to stop the crimes, national or personal, that scatter it broadcast. By the degenerate Spaniard the degenerate American savage sent through Europe the rotting poison which, after four centuries, returns to us and is working ruin in every city, village and hospital of the land, creating still its inevitable impotence, sterility and death. How effective both the sin and the disease have been in ending the Spanish power none can accurately, perhaps none sufficiently, estimate. As we take the reins from the nerveless hands of Spain, it behooves us to look carefully into the relationship and results of war, colonization and venereal disease.—*American Medicine*.

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### A Three-Year-Old Composer and Pianist.

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At the psychological congress held in Paris in connection with the Exposition, two scientists introduced to their colleagues and the audience a Spanish child, three and a half years of age, who not only plays but composes remarkable music. This prodigy, Pepite Rodriguez Ariola, is a Spanish youngster who is small and delicate for his

age and looks rather girlish. An account of his appearance and performance before the congress is published in the Parisian papers, and we gather from them the following almost incredible facts:

Pepite has never had a music lesson in his brief life. When but two and a half years old, he astonished his mother by repeating, with considerable accuracy, taste and understanding, a fine sonata which he had heard her play. Since then the piano has been his favorite toy, and he has not only imitated his mother successfully, but has originated compositions of his own, developing melodious themes and giving them a suitable setting. He plays and composes without notes. He improvises and retains his improvisations in his memory.

At the congress he was asked to play what he liked. He first performed a military march of his own, dedicated to the Spanish King; then a habanera, a mazurka, variations upon an original melody, and, finally, the Marseillaise with a novel accompaniment and curious ornamental harmonies. Musical critics declare that all his pieces show as much knowledge of the technique of music as the best composers possess, and the *Temps* says that, in point of merit, they are equal to the works of the majority of educated musicians. In less than a year, Pepite has acquired, without any guidance or instruction, the mastery of the piano and the production of nearly all the effects it is capable of. His technique is striking, and he plays with a lightness, grace, clearness and beauty of tone that are truly marvelous.

Yet he is extremely childish in his ways. He likes applause, and after every piece he turns to the audience, smiles and exhibits innocent enjoyment of his triumph. The psychological congress was greatly perplexed over the singular phenomenon. The future of Pepite it did not venture to predict. Will he be another Mozart and, having begun so early, will he go as far as that precocious genius and be a truly great composer in later years, or will he remain in his present anomalous stage of development and preserve only a memory of the infant prodigy days? The scientists left the question to the decision of time.—*The Literary Digest*.

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McCann lays down the general rule that in closing an opening in any hollow viscus two important principles must be borne in mind: 1. To avoid all tension on the stitches; 2. To avoid passing the suture through the inner lining of the viscus.



## News and Abstracts.

### Annual Meeting, A. R. R. S.

The American Roentgen Ray Society desires to announce that its next meeting will be held in the city of Chicago, on Dec. 10 and 11 of the current year. There has been secured a most excellent local committee of arrangements, composed of well known and leading men of Chicago, under the chairmanship of Dr. Ralph R. Campbell. This committee further embraces the names of Drs. John B. Murphy, Louis E. Schmidt, M. L. Harris, W. L. Baum, H. G. Anthony and W. A. Pusey. The personnel of this committee gives evidence of the earnest desire of the society to have its meetings entirely ethical and scientific.

The very nature and mystery of the X-ray and the tremendous impetus in a therapeutic way which has been given to its use during the past year, will unquestionably encourage a very widespread abuse on the part of many irresponsible persons. It is the hope of this society to serve a useful purpose in encouraging on the one hand a proper understanding of the uses and limitations of the X-ray, and on the other hand to limit and control the inevitable abuses which are now springing up on all hands.

It is hoped that all those who feel an interest in the uses to which the wonderful discovery of Professor Roentgen may come to be put, will bear the date of this next meeting in mind and communicate with the local committee of arrangements, or with the secretary of the society.

JAMES B. BULLITT, *Sec.*

### For a Young Man of Twenty-Five.

Let us suppose you are working on a weekly salary. You would like to save money, but there are so many ways to spend that week after week slips by and all your earnings are paid out. At the end of the year nothing has been saved, and you make the good resolution that you will begin at once. It is very difficult to do this unless you undertake it systematically. Here is a first-class plan. Take out a Twenty-Year Endowment in some reliable life insurance company, for \$1,000. You can meet the annual premiums in this way: Each week when you receive your salary, go at once to a savings bank and deposit one dollar. Do this faithfully, and at the end of the year,

when the premium is due, you will have more than enough to pay it. If you are not in the vicinity of a savings bank, lay aside your dollar just as conscientiously.

At the end of the twenty years you will receive \$1,000, increased by dividends, and you will not have been greatly inconvenienced by the outlay. It is much harder to wait until a month or two before your premium falls due and then make every effort to gather the money hurriedly.

**ILL-TIMED CLEANLINESS.**—It is a recognized scientific fact, we believe, that the street dust of cities is full of all kinds of bacteria, and especially of the germs of the dreaded tuberculosis. Naturally it must be most deadly in the places where men most do congregate. If there be any more densely populated area upon the face of this globe than the approaches of the Brooklyn bridge between 8.30 A. M. and 9.30 A. M., it has yet to be discovered. Here, certainly, no sweeping ought to be attempted in the rush hours. Surely, even the intelligence of an assistant district foreman of street-cleaning ought to be sufficient to teach him that the sweeping of granulated street refuse into the faces of unoffending and helpless pedestrians is a practice as dangerous as it is unpleasant. The evil is not confined—in Brooklyn, at any rate—to any one region. In Nostrand Avenue, for instance—a great thoroughfare—sweeping frequently begins at 8 A. M., just at the moment when men are hurrying from their breakfast tables to their offices. Moreover, in this instance, the sweepers seldom even pretend to use any water for sprinkling. So common is the evil that comparatively little attention is paid to it, yet it involves an actual danger which very properly might provoke the interference of the Board of Health. Then again, in a civilized community, personal comfort and decency ought sometimes to be taken into consideration.—*The Medical News.*

The birds who have been closely scanning the fashion journals to see which branch of their family is likely to be murdered this fall, for the trimming of hats, according to Dame Fashion's edict, will be pleased to learn that ostrich tips and flowers are to be used largely this fall and winter. As a matter of course, most any sort of bird, from a canary to a turkey buzzard, comes in handy in trimming a hat, so none of the feathered tribe should consider themselves immune from the dangers that have always confronted them.—*The Boston Herald.*

# Phillips' Emulsion

50% best NORWAY COD LIVER OIL  
minutely sub-divided,  
WITH WHEAT PHOSPHATES (Phillips')

Pancreatized, Palatable, Permanent, Miscible in Water, Milk, Wine, etc.

# Phillips' Milk of Magnesia

Mg H<sub>2</sub> O<sub>2</sub> (FLUID.)

"THE PERFECT ANTACID."

for correcting Hyperacid conditions—local or systemic.  
Vehicle for Salicylates, Iodides, Balsams, etc.

# Phillips' Phospho-Muriate of Quinine,

TONIC AND RECONSTRUCTIVE.

COMP.

WHEAT PHOSPHATES, WITH MURIATE OF QUININE AND STRYCHNINE.

PHILLIPS' WHEAT PHOSPHATES (ACID).  
PHILLIPS' SYRUP OF WHEAT PHOSPHATES.  
PHILLIPS' DIGESTIBLE COCOA.

THE CHAS. H. PHILLIPS CHEMICAL CO., NEW YORK.

## The ALKALINITY in Milk Modification

**D**OCTOR;—the following facts concerning the merits of the two salts most used for rendering cow's milk alkaline for infant feeding, are worthy of your attention.

In the ash of human milk the predominating salts are Potassium Salts and not Lime Salts.

Potassium combinations with butter fats are soft and easily soluble. Lime combinations with butter fats are insoluble.

Potassium Salts are less liable to cause constipation than Lime Salts. (Cheadle.)

A solution of Potassium Bicarbonate is permanent in composition. Lime Water is changeable and extremely liable to be of different alkalinity.

Potassium Salts are more effective in preventing the formation of hard curds than Lime Salts.

The nature of Potassium is to soften, the nature of Lime is to harden. In view of these facts we claim that Bicarbonate of Potassium is a more desirable agent than Lime Water for rendering cow's milk alkaline.

*The SALT in MELLIN'S FOOD is BICARBONATE of POTASSIUM*

MELLIN'S FOOD COMPANY, BOSTON, MASSACHUSETTS

### Preventing Nausea and Vomiting from Various Causes.

Chloretone has been given in many cases by Clow (*International Journal of Surgery*, December, 1901,) with success.

Prior to the extraction of sixteen teeth, he gave a woman, aged forty-three, 25 grains of chloretone before an anesthesia of fifteen minutes. Return to consciousness was all that could be desired. The same results were obtained in the case of a man seventy years old, who was given 20 grains of the drug, then  $1\frac{1}{2}$  drachms of chloroform, in the usual manner, upon an ordinary inhaler. Six teeth were removed.

Twenty-five grains were given to a woman, aged twenty-four, prior to administering  $2\frac{1}{2}$  drachms of chloroform and 6 ounces of ether for an operation to remove the right kidney. Vomiting took place only on the third day. The stomach was washed out with a weak solution of carbolic acid, and chloretone, in five-grain doses, was administered every hour until the patient was better. The patient rapidly recovered.—*Therapeutic Gazette*.

**LEPROSY IN THE UNITED STATES.**—According to scientific government investigations directed from Washington for several months, there are at least 275 cases of leprosy in the United States. That number has been reported, but it is thought probable that the real number is nearer a thousand. For various reasons, physicians who have cases of this disease in many instances fail or refuse to report them. But the number reported is sufficiently large to occasion some alarm. Seventy-four of the known cases are in New Orleans, chiefly among the Italian population. There are twenty-three in Minnesota, mostly among Scandinavians in the rural settlements. There are fifteen cases in North Dakota, and two in South Dakota, among the same people. So far as has been ascertained, there are none in Michigan or in Indiana; Chicago has five cases, New York six, Boston none.

### Dysentery and Flatulence.

The griping pain and flatulence which accompany bowel and stomach complaints, particularly during the heated term, are so readily overcome and controlled by the timely administration of one or two Antikamnia & Salol Tablets, repeated every two or three hours, that it behooves us to call our readers' attention to the grand efficacy of this well known remedy in these conditions. The above doses are, of course,

those for adults. Children should be given one-fourth tablet for each five years of their age. When the attack is very severe, or when disturbance is evidenced at or near the time of the menstrual period, we find it preferable to give two Antikamnia & Codeine Tablets alternately with Antikamnia & Salol Tablets. The latter tablets promptly arrest excessive fermentation and have a pronounced sedative effect on the mucous membranes of the bowels and stomach, and will check the various diarrheas without any untoward effect.

**THE PLAGUE** is becoming very widespread in its distribution; it has appeared in Rio de Janeiro, in Cape Colony, and has been increasing. The same is true of Mauritius. It has appeared in West Australia and Hong Kong. It is present in Karigagua, in Russia, but is decreasing there. In Argentine a number of cases occurred in San Nicolas, and suspected cases appeared in Belleville and Marious Jaurez, in Cordova Province.

I have used Bromidia in cases of insomnia, restlessness and threatened convulsions, with surprising results, finding that a dose of from 15 drops to one drachm to be sufficient, according to age and how often to be repeated. I have combined Bromidia with Papine where I wished to annul pain with excessive nervousness, the combination acting very happily also in bladder troubles. I use Bromidia and Papine very much in my family.

CHAS. E. QUETIL, M. D.

Philadelphia, Pa.

**NOT KENTUCKY OYSTERS.**—The gentleman from Indiana smiled an unbelieving smile.

"This story of a lot of oysters being drowned off the Virginia coast by fresh water floods sounds fishy to me."

The gentleman from Kentucky shook his head. "An oyster is not a fish, suh, if you will allow the correction," he said; "but there is nothing suprising in the statement. The foolish oysters, suh, probably endeavored to drink the watah, suh!"—*Cincinnati Commercial Tribune*.

**A USEFUL FLY.**—Experimenters of the United States Government saw one dragon fly eat up 800 mosquitoes in an hour, and it is now proposed to breed the "darning needle" on a large scale, to see if they cannot be made sufficiently numerous to kill the mosquitoes responsible for propagating diseases.

THE BEST RESULTS ARE ASSURED IN BROMIDE  
TREATMENT WHEN YOU SPECIFY

# PEACOCK'S BROMIDES

AND THE GENUINE IS DISPENSED.



NEUROLOGISTS and General Practitioners prefer it because of its superior qualities over the commercial salts. . . Each fluid drachm represents fifteen grains of the combined chemically pure Bromides of Potassium, Sodium, Ammonium, Calcium and Lithium.

DOSE: ONE TO THREE TEASPOONFULS, ACCORDING TO THE AMOUNT OF BROMIDES REQUIRED.

# CHIONIA

From CHIONANTHUS VIRGINICA.

RE-ESTABLISHING portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.

Hepatic  
Stimulation.

Without  
Catharsis.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES A DAY.

FOR CLINICAL TRIAL WE WILL SEND FULL SIZE BOTTLE TO ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

PEACOCK CHEMICAL CO.  
ST. LOUIS, MO., U. S. A.

In CARDIAC and GENERAL MUSCULAR RELAXATION,  
due to Functional Cardiac and Circulatory Disturbances,

# CACTINA PILLETS

Has many Advantages over other Heart Stimulants.

IT HAS NO CUMULATIVE ACTION, AND  
IS ABSOLUTELY SAFE AND RELIABLE

EACH PILLET REPRESENTS ONE ONE-HUNDREDTH OF A GRAIN CACTINA, THE ACTIVE PROXIMATE PRINCIPLE OF CEREUS GRANDIFLORA

DOSE: ONE TO FOUR PILLETS THREE TIMES A DAY.

SAMPLES MAILED TO PHYSICIANS ONLY.

The CHIEF Characteristics of the Physiological Action of

# SENG

is to promote Normal Digestion by encouraging the flow of Digestive Fluids.

It is the Modern and Most Successful Treatment for

INDIGESTION.

A PALATABLE PREPARATION OF PANAX SCHINSENG  
IN AN AROMATIC ESSENCE.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES  
A DAY.

A FULL SIZE BOTTLE, FOR TRIAL, TO PHYSICIANS WHO WILL PAY EXPRESS CHARGES.

SULTAN DRUG CO., St. Louis, Mo., U. S. A.

### Instantaneous Dry Heat for External Application; Electric Substitute for Hot Water Bag.

By DE FOREST WILLARD, M. D., of Philadelphia.

#### To the Editor of the Philadelphia Medical Journal:

Electricity being now in use in nearly all of our hospitals and in many private homes, I have found the following use of the current very helpful. It has the advantage of being instantly applicable, and especially at night it saves much trouble and time in the securing of a hot water bag.

The ordinary electric bulb attached to a long wire, which is in common use, can be wrapped in one or two layers of cloth and applied directly to the part affected, the heat being readily regulated by the thickness of the folds. At the first symptoms of a chill, during the premonitory creeps down the spine, such a bulb applied directly between the scapulæ is of the greatest comfort, and will often prevent a rigor. It has the advantage, too, that the patient lying in bed can quickly seize it himself as it hangs by his side, and make himself comfortable even before the nurse reaches him.

To the physician also who returns to his office cold and wet, this bulb dropped in beneath his coat between the shoulders, while he sits at his desk, will be the speediest means of making him comfortable. Once tried, it is certain to be repeated.

For local pains in abdomen or chest, the neuralgic pains in the head, it has all the advantages of the hot water bag and never grows cold.

The bare bulb used as a flatiron is also very helpful in rheumatic pains of muscles, in sciatica, etc. Try it!

As a heat producer after operation, as an application for cold feet, etc., it has the special advantage of quick and continuous service.

**BREAD TRUST.**—The National Bread Company was incorporated in Trenton, N. J., July 26, with a capital of \$3,000,000. The plan at the outset is said to be the control of the output of bread in New York City, Jersey City and Newark. Later the company expects, through a beginning in Chicago and St. Louis, it is said, to gain control of the output of the product in all of the large cities of the country. A patent, by which hand kneading is done away with, is owned by the corporation, and it is claimed that each loaf will be increased 80% in weight by the use of this machine. More water can be

absorbed by the flour, the loaves are thus made heavier and more loaves can thus be made from a given amount of flour. By the reduction in the labor of bread-making, required in the use of this new machine, 50,000 employees, it is said, will be affected.

**A MEDICINE SELLING SCHEME.**—Two medicine firms of New York City have been forbidden the use of the mails by a recent order from the post-office department at Washington. Information had been received that in order to sell their remedies these firms had resorted to the following device: An advertisement, containing a puzzle, was published, and \$100 was to be divided equally among those sending correct answers. To the successful competitors a letter was sent containing a "certificate of awards" and a request to return 50 cents to the company in order to be named in the list of those to receive a prize. Later, a second communication was received, stating there were nearly 4,000 correct answers and each person would receive 3 cents. This sum was not forwarded, however, because the company desired to give all an equal chance to earn a diamond ring which could only be obtained by selling a certain amount of their medicines.

I am thoroughly satisfied with the results I obtain from the use of Peacock's Bromides. I prescribe it with much confidence, and while I have seen others, said to be "just as good," I do not tolerate them, but consider this a splendid recommendation for the preparation.

H. A. SCHRAEDER, M. D.

Braymer, Mo.

**COCOA JUNKET.**—Put an even teaspoonful of any good cocoa and two teaspoonfuls of sugar into a sauce-pan; scald with two tablespoonfuls of boiling water; rub this paste smooth; then stir in thoroughly one-half pint fresh, cool milk; heat this mixture lukewarm (not over 100°F.); then add one teaspoonful of Fairchild's Essence of Pepsine and stir just enough to mix; divide quickly into small cups or glasses and let stand until firmly jellied, when the junket is ready for use; it may be placed on ice and taken cold; as a dessert may be served with whipped cream.

**Sanmetto in Prostatitis, Enuresis, Catarrh of Bladder.**

In prostatitis, enuresis, catarrh of bladder and all diseases of the genito urinary system, Sanmetto has been indispensable to me.

J. T. W. KERNS, M. D.

Bellaire, Ohio.

*Doctor:*

*When seeking a palatable and highly nutritious liquid food to maintain a patient's strength during critical illness, remember NUTRIENT WINE OF BEEF PEPTONE.*

---

**ARMOUR & COMPANY**

**CHICAGO**

### YOU WILL NEVER BE SORRY—

For living a white life.  
 For doing your level best.  
 For your faith in humanity.  
 For being kind to the poor.  
 For looking before leaping.  
 For hearing before judging.  
 For being candid and frank.  
 For thinking before speaking.  
 For harboring clean thoughts.  
 For discounting the talebearer.  
 For being loyal to the preacher.  
 For standing by your principles.  
 For stopping your ears to gossip.  
 For asking pardon when in error.  
 For the influence of high motives.  
 For being as courteous as a duke.  
 For bridling a slanderous tongue.  
 For being generous with an enemy.  
 For being square in business deals.  
 For sympathizing with the oppressed.  
 For giving an unfortunate fellow a lift.  
 For being patient with cranky neighbors.  
 For promptness in keeping your promises.—  
*The Dietetic and Hygienic Gazette.*

### Mercuriol by Inunction—Formula for an Efficient Unguent.

When an ointment of Mercuriol is required for external use, a prescription like the following will yield a very efficacious preparation, containing ten per cent. of Mercuriol:

R Mercuriolis, gr. xlvij.

Petrolati Mollis,

Adepis Lanæ Hydrosi, ää 3 ijss.

M. Sig.: Ten-per-cent ointment of Mercuriol.

Mercuriol is worthy of a thorough trial whenever a mercurial ointment is indicated in dermatologic practice. Whether a purely epidermic or endermic effect be desired, or it be intended to produce a systemic effect by mercurial inunction, Mercuriol—the nucleide of mercury, and a true chemical compound—is the remedy above all others.

### APPLICANT'S RIGHT TO EXAMINE PAPERS.

—The city solicitor of Washington, D. C., has, in an opinion handed down to the Board of Medical Supervisors, decided that an unsuccessful applicant for license to practice medicine has the right to inspect his papers afterward. The decision was the result of the refusal of the board to permit such inspection by a rejected candidate.—*American Medicine.*

### JUDGMENT FROM MR. MCGARVEY—

“Shure, it's meself thot do sometimes b'lave thot flats take th' name fr-om th' pable thot lives in 'em.”

### Hydrogen Dioxide in the Removal of Powder Stains.

After picking out all the powder he could from the face of a man badly burned by the premature explosion of a shell that he was forcing into a rifle, Stansbury dropped (*American Medicine*, Aug. 17, 1901,) one or two drops of hydrogen dioxide into each opening, and then bathed the whole surface. The result was excellent, although there was only one treatment; there has not been the slightest trace of staining.—*Therapeutic Gazette.*

The number of men who are willing to make great sacrifices and take great chances of losing their lives for the advancement of science is legion. Some engage to go to the land of the perpetual snows in search of the pole; some permit themselves to be experimented upon by being inoculated with the germs of more or less poisonous diseases. At the quarantine station in New York harbor, is Dong Gong, a Chinese leper. Six doctors sought permission to treat the patient. Dr. Knapp, of St. Louis, the one chosen to care for the case, will be separated from his wife and family and isolated from the world. With his patient and fellow-prisoner, the doctor will live in a three-room house until necessity for his services is ended. “Any disease is incurable until its cure is discovered,” said Dr. Knapp. “If a cure for leprosy is ever found, it will be found by someone who has devoted years to the study of an actual case of the disease, and I am not without hope that I may at least contribute to such a discovery.” It is of such stuff that heroes are made.—*The Boston Herald.*

I regard Seng as one of the best, if not the best, remedy that I have ever had experience with in all dyspeptic and gastric troubles. I have been practicing 35 years, and thus you will see this is saying much for a remedy. Its action is slow, but I deem this all the better.

D. W. TICE, M. D.

Troy, Mo.

QUITE A NUMBER.—“Willie, whom did George Washington marry?” “The widow Custis, ma'am.” “Had he any children?” “Yes'm—the sons and daughters of the Revolution.”—*Life.*

IF IT ONLY WOULD.—She: “I love this excessively hot weather! Don't you, Mr. Boreham?”

He: “No! I can't stand it. I shall go away if it continues!”

She: “I do hope it will!”—*London Punch.*



# NOW WHAT IS IT?

"Read only that from which you may derive benefit."

Even these words are important only to those whose privilege it is to profit by them. Of course, we cannot hope to convince you by a mere statement when an actual, personal experience is needed to prove the truth of our assertion. But the professional experience of thousands of physicians is daily demonstrating the fact that "Colden's Liquid Beef Tonic" (Ext. Carnis Fl. Comp. Colden) composed of Beef, Iron, Cinchona, and Brandy (Prep. No. 1); and of Beef, Cinchona, and Brandy, alone, (Prep. No. 2)—represents the "ideal combination of a Food, a Tonic, and a Stimulant." This fact may persuade YOU to try it; the result of the trial will prove the truth of our assertion.

The CHARLES N. CRITTENTON CO., Sole Agents for the United States.

Laboratory: 115 and 117 Fulton Street, New York.

Samples sent free on application, to physicians.

## THE ALKALINITY OF BLOOD SERUM

# GLYCO-THYMOLINE

(KRESS)

ALKALINE, ASEPTIC, ALTERATIVE.

In treatment of

## Summer Complaints and Dysenteric Conditions

Administered internally Glyco-Thymoline (Kress) acts as a carminative, antiseptic, alterative, stimulant, antacid and meets many of the requirements of the physician during the summer months.

\_\_\_\_\_, M.D., Cleveland, O., reports among other cases, as follows:

John T—, two months old baby, typical case of Cholera Infantum, had small hopes of saving the little one; put him on equal parts of Liq. Bismuth and Glyco-Thymoline (Kress), one-half teaspoonful doses every three hours. It controlled the vomiting and regulated the bowels and the child made a nice recovery.

\_\_\_\_\_, M.D., Washington, D. C., writes:

I have used Glyco-Thymoline (Kress) very successfully the past season in many serious cases of dysenteric troubles as also in other alimentary ailments with great benefit.  
Feb. 16th, 1900.

**SPECIAL OFFER** A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges

**KRESS & OWEN COMPANY, Chemists, 221 Fulton Street, New York**  
Corrects Hyperacidity and allays Enteritis

THE ORIGINAL SHERLOCK HOLMES.—Now that Sherlock Holmes has been brought before the public again, in Dr. Conan Doyle's latest book, "The Hound of the Baskervilles," it may be interesting to recall his original. According to a literary page issued by McClure, Phillips & Co., he is Dr. Joseph Bell, who was one of Dr. Doyle's medical instructors at Edinburgh. One of his former pupils tells the following incident concerning Dr. Bell and a man, evidently in distress, who walked into the hospital for treatment.

"Well, what's the matter with you?" asked Dr. Bell.

"I don't quite know, sir," replied the man.

"What's your business?"

"Cobbler, sir."

"Ever been anything else?"

"No, sir; I've been a cobbler all my life."

"Well take him in and examine him. That," said Dr. Bell to his class, when the patient had been taken into the examination-room, "is a very odd case. The man is a deserter from the Indian army. He knows perfectly well what's the trouble with him, but he's afraid to tell us for fear we'd know he contracted it in India. Yet he's in so much pain that he risks coming to us, trusting that we won't find out what's the matter with him, but will be able to relieve him without finding out. Strange case."

"Just then the patient was brought back from the examination-room.

"Well," said Dr. Bell, "did you find any bullet wounds or sabre cuts on him?"

"Why, yes, sir," the doctor who had made the examination replied, in great surprise. "There were two bullet wounds, and he had a long scar across his left shoulder."

Dr. Bell turned to the patient.

"This disease you have," he said, "was contracted in India while you were in the army. You left the army. Why didn't you go back?"

The man hung his head.

"Why did you say you'd been a cobbler all your life? Deserter aren't you?"

"Yes sir," faltered the patient.

But that didn't surprise the class; Dr. Bell was always correct in his deductions.

E. U. Garvin, M. D., Cleveland, Ohio, states: I have tried Glyco-Thymoline (Kress) on wound of tonsil produced by a child falling with a tin horn in the mouth. I kept this part thoroughly cleansed with Glyco-Thymoline (Kress), full strength, and result was gratifying. I wish to give it a thorough test in catarrhal troubles.

ASPIRIN IN PLEURISY WITH EFFUSION.—N. A. Savelieff (*Medicinskoie Obosrenie*, April, 1901,) employs aspirin in cases in which salicylic acid or salicylate of soda is indicated, with exceptionally good results. The untoward effects of the latter are, as a rule, absent when aspirin is used. In one case of pleurisy this drug rendered valuable services by reducing the temperature, producing profuse diaphoresis and diuresis with consequent diminution of the effusion. The only objection to the drug is the high price. The author reports also a case of idiosyncrasy towards the drug. A woman suffering from rheumatism took 5 grams of aspirin in fractional doses. On the second day ringing in the ears, weakness and delirium developed. [A. R.]—*Philadelphia Medical Journal*.

A QUICK LUNCH.—Customer (to waiter): "Here, John, take my order—oxtail soup, roast lamb, fried sole, green peas, onions, tomatoes, cucumbers, mince pie, cheese, and coffee, and be spry about it; my train leaves in exactly six minutes."—*Tit-Bits*.

CHEAPER.—A farmer and his wife went into a dentist's. "How much do you charge for fillin' teeth?" asked the farmer. "From ten shillings to one pound." "And for pullin'?" "Two shillings and sixpence." "Mariar," he said, turning to his wife, "you'd better get it pulled."—*Tit-Bits*.

Dr. James R. L. Daly, New York, says: Heroin possesses many advantages over morphine as a respiratory sedative, among which the following may be mentioned:

1.—It prolongs respiration and at the same time increases the volume of each inspiration, making Glyco-Heroin (Smith) a remedy much to be desired in the treatment of cough.

2.—Absence of danger of acquiring the habit.

3.—It does not cause unpleasant disturbance of the stomach or intestines.

4.—It can be prescribed in cases in which heart complications occur, without risk of any deleterious effect upon that organ.

5.—The fact that it relieves the distressing cough which is often the cause of many sleepless nights, thus insuring normal sleep, and obviating the necessity of using hypnotics, should not be overlooked.

THE CURE SUGGESTED.—"Will men eventually wear bustles?" inquires an organ of the tailors. Some men may try it, but there will be enough other men who wear broad-toed boots to neutralize the fashion.—*From the Louisville Courier-Journal*.

# HEAT CANNOT BURN

out the vitality of the  
Summer invalid fortified by

## GRAY'S Glycerine TONIC Comp.

It is the ideal hot weather remedy for  
physical depression, disturbed stomachs,  
malnutrition, nervous exhaustion and  
sufferers from chronic organic disease.

THE PURDUE FREDERICK CO.,  
No. 15 Murray Street, New York.



## MICAJAH'S MEDICATED UTERINE WAFERS

LEUCORRHOEA, ENDOMETRITIS, VAGINITIS, GONORRHOEA  
and all other diseases of an inflammatory character readily  
respond to its ANTISEPTIC, ASTRINGENT and ALTERATIVE Properties

No powder to spill. Nor water to soil the clothing.

Samples and Literature by mail Gratis

SIG: Insert one Micajah Wafer into the vaginal canal, up to the Uterus, every third  
night, preceded by copious injections of HOT water.

MICAJAH & CO.

Warren, Pa.

**SINCERITY.**—As one intellectual weakling after another tumbles over into Christian Science or some form of medical quackery, each pretends to find his justification in "sincerity." For example, one preacher in announcing his adhesion to Eddyism and his intention to "start a school" of "medico-psychology" calls Dowie "insincere" and "a swindle" and accounts for Mrs. Eddy's success because of her "faith" and "sincerity." Of course men of any historic or psychologic knowledge do not make such silly errors. The whole phenomenon of unchristian unscience, etc., is a mere corollary of the modern delusion of democracy that an ignorant person is as good a judge of a matter of science as the expert who has seriously studied it. Medicine and psychology, or even "medico-psychology," requires years of calm study, observation and experiment to warrant opinion or judgment. Sensational egotists by the hundred, without an hour's study of medicine, without any right to an opinion, at once announce their cocksure philosophy concerning the entire matter, and start "a school." They are sure they are right because they are "sincere." It is indeed well to be sincere, but sincerity without other virtues is the single excuse the ass has for braying. Sincerity does not make the braying either language or music. Sincere were the inquisitionists, the witch-burners, the seekers after the fountain of eternal youth, and a thousand modern types of half-crazy fad-riders. Have I a right to be sincere?—is the question they should all ask themselves. A divine who says Dowie is insincere and Mrs. Eddy sincere has too little acumen to be a teacher either of religion or of "medico-psychology."—*American Medicine*.

#### Pruritus.

Dr. P. C. Sutphin, of Canmer, Ky., writes us that he has used Alumol in pruritus ani and pruritus vulvæ with the most decided success. He used it in three chronic cases of the former and one of the latter, with prompt relief and cure in all the cases. His formula is as follows:

℞ Alumol, ʒii-3j.  
Camphor, ʒij.  
Vaselin, ʒj.

M. et ft. ungt.

Sig. Use night and morning.

Rub camphor up fine and add the alumol and vaselin.

Properly used, he thinks this quite a specific in the above named diseases, and most likely, also, pruritic diseases generally of the genital organs, and highly recommends

it in these cases, often stubborn of cure, and always most harassing to the patient.—*Medical Bulletin*, November, 1901.

#### BOOKS AND BOOKS.

Professor.—"Miss Penelope, what do you think of modern fiction?"

Miss Penelope—"Oh, professor, it takes me all my time to read it; I don't have time to think about it."—*Detroit Free Press*.

**LACK OF CONFIDENCE.**—Assistant: "Is the meaning of this poem absolutely incomprehensible to you?"

Magazine Editor: "Absolutely! You're going to accept it, aren't you?"

Assistant: "Oh, yes. But I wasn't willing to trust my own judgment."—*Life*.

Elbridge Simpson, M. D., Hudson, N. Y., says: "I have used Fellows' Syrup of Hypophosphites in cases of consumption and other lung and throat diseases, with the most gratifying results. Of the various forms of administering phosphorus and phosphatic preparations in use, none have been found so completely adapted to the requirements of the age."

**STATISTICS OF DEATHS.**—A study of the last census bulletin, relating to the statistics of disease, compared with the census of 1890, shows that there has been a decrease in deaths from tuberculosis of 59.9% in 100,000 of population. But while tuberculosis has decreased, pneumonia has increased 5%. Influenza has increased so that the death rate from it is 23.9% in 100,000. Other diseases in which the death rate has increased in the order of percentage are: Kidney affections, apoplexy, cardiac disease and carcinoma. Deaths from old age and premature births have increased during the last decade. The increase in kidney disease is 24%, or a death rate of 83.7 in 100,000. In the general death rate there has been a decrease of 1.8 per 1,000 of population. Owing to the increased sanitary measures the infant mortality rate is lower. In fact, deaths of children under 5 years of age have materially decreased during the last 25 years. The length of human life is said to be increasing in the United States. Statistics compiled by the Marine Hospital Service for 1,190 cities and towns in the United States having a population of 1,000 or more indicate an annual mortality for the last calendar year of 17.47 per 1,000 of population, according to the census of 1900. North Dakota, with a death rate of 6.95 per 1,000 of population, was shown to be the most

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in Anaemia, Bronchitis, Phthisis, Influenza, Neurasthenia, and during Convalescence after exhausting diseases.

*Dr. Milner Fothergill wrote: “It (Fellows’ Hypophosphites) is a good all-round tonic, specially indicated where there is NERVOUS EXHAUSTION.”*

**SPECIAL NOTE.**—Fellows’ Hypophosphites is *Never sold in Bulk*, and is advertised only to the Medical Profession. Physicians are cautioned against worthless substitutes.

Medical letters may be addressed to

MR. FELLOWS, 26 Christopher St., New York.

LITERATURE OF VALUE UPON APPLICATION.

healthy state in the country, and Marion, Ia., the most healthy town. It has a population of 4,100 and there were only 6 deaths in 1900, making the death rate 1.46 per 1,000.—*American Medicine.*

#### **Simplicity in Treatment.**

Simplicity in treatment, especially in diseases of women, is an item of no small importance. Micajah's Medicated Uterine Wafers are particularly efficacious in Leucorrhea, Endometritis, Gonorrhea, etc., and, as there is no powder to spill nor water to soil the clothing, they offer an ideal treatment in the above conditions. Insert wafer in vaginal canal up to the uterus every third night preceded by copious injections of hot water.

**SMOKING CARRIAGES FOR LADIES.**—On the continent smoking is growing so rapidly in favor among the fair sex that on some of the Belgian railroads smoking apartments are to be provided exclusively for women. This result has been brought about through a young lady finding herself the object of much protest on her producing a cigarette in an ordinary compartment reserved for ladies. The young lady has taken action to compel all the Belgian companies to provide smoking accommodation for ladies.—*London Health.*

#### **"Invaluable in Insomnia."**

##### **STATE REFORMATORY,**

HUTCHINSON, KANSAS, Dec. 21, 1898.

*John B. Daniels, Atlanta.*

DEAR SIR: Will you send three bottles Daniel's Passiflora to Mrs. Maria Stone, 936 Centre Street, Syracuse, New York. She is a patient of mine and I want her to be sure of the genuine article. Express it to her and send bill to me, or draw on me at sight for same and I will remit at once, or protect draft. Respectfully, &c.,

A. M. HUTCHINSON, M. D.

I use large quantities of it at the State Reformatory here. It is invaluable in insomnia. A. M. H.

**ENGINEERS BETTER PAID THAN PHYSICIANS.**—It appears that in Russia an engineer commands a salary of four to five thousand roubles, while a physician is satisfied with seven hundred and fifty.

A physician writing to Messrs. Armour & Co. recently said: "I am highly pleased with the action of your Red Bone Marrow. It is the best agent for rebuilding after serious illness that I have as yet found."

#### **Seasonable Suggestion.**

Digestive disturbances so prevalent at this season and followed by Diarrhea, Cholera Morbus and Cholera Infantum demand prompt attention and treatment. Hayden's Viburnum Compound (genuine), administered in dram doses in hot water, not only corrects the existing condition, but is a pronounced antispasmodic and relieves the severe pain always accompanying these cases.

#### **Six Notable American Medical Achievements.**

Dr. G. E. de Schweinitz has picked out six American doctors who have each done some epochal work: Beaumont, for his work in gastric digestion; Gerhard, for his observation that led to the differentiation of typhoid and typhus fevers; Holmes, for his recognition of the contagiousness of puerperal fever; Wood, for his work in therapeutics, and S. Weir Mitchell, for his rest cure. This list might, as the doctor justly says, be somewhat enlarged, and these names should certainly not be omitted from it: Ephraim McDowell, who performed the first ovariectomy, and Morton, to whom the world owes the first practical demonstration of ether anesthesia. American medical students and graduates cannot be taught too earnestly to respect the work of their own countrymen and not to look abroad too exclusively for knowledge and initiative.—*Exchange.*

#### **A New Publication.**

We have just received from Messrs. P. Blakiston's Son & Co., the first number of *The Medical Book News*, a bi-monthly devoted to medical literature and the allied sciences. This magazine will furnish information of great use to physicians and students in selecting books pertaining to medicine. It will be sent to physicians on application to the publishers.

**BATHS ON TRAINS.**—Russia proposes to have baths and douches on trains running long distances, an innovation well worth considering.

**A USEFUL AMUSEMENT FOR HOSPITAL INMATES.**—The hospital of Alafusoff was recently fitted up with an expensive magic lantern for the amusement as well as instruction of the patients. Once a week pictures are thrown on the screen and descriptive lectures delivered by the hospital physician.

# Journal of Medicine and Science.

ISSUED ON THE TENTH OF EACH MONTH.

In the Interests of Public Health, and in order that the People of Maine may reap the great Benefits, both hygienic and economic, assured by a judicious Application of the Principles of Preventive Medicine, this Journal supports the following Propositions and urges Physicians and Laymen to work diligently to further their Consummation.

- 1st. The Establishment of a Sanatorium for the Treatment of the Consumptive Poor.
  - 2nd. The Abolishment of the Coroner System and the Appointment of Medical Examiners.
  - 3rd. The daily Inspection of School Children by School Physicians.
  - 4th. The more liberal Endowment of our Medical Schools by private Charity, and the voting of larger Appropriations to our State and Local Boards of Health.
  - 5th. The Establishment of a State Bacteriologic Laboratory.
- For, surely, health is the prime essential to success in life, and the health of the people is the foundation upon which all their happiness and all their power depends.

Vol. VIII.

PORTLAND, MAINE, AUGUST, 1902.

No. 9.

## \*Antisepsis and Asepsis in General Practice.

By N. M. MARSHALL, M. D., of Portland.

**I** THINK a more appropriate title for what I am about to afflict you with, would have been, and in fact is,—  
Medical Hash—for when your secretary asked me what the title of my paper was to be, I must confess that, through carelessness, the fact that I was supposed to furnish such an article, had entirely gone from my mind and memory, and as there were suddenly several subjects presented to my mind at that time, I felt that the consideration of several subjects would be easier for me, and at the same time furnish more material to be threshed by you.

Therefore I decided to present two or three different topics for your discussion this evening, and at the same time air some ideas that had come to me from experience. I invite the severest criticism, and hope that whatever there may be of sound grain among the chaff may be winnowed out,—sufficient perhaps for a lunch if not a square meal, remembering that we are told to despise not the day of small things.

The first thought that occurred to me for a topic was Antiseptics in General Practice, and as I thought that would look better on a postal card I would give that as the principal topic. Hence, the subject Antisepsis and Asepsis in General Practice.

\*Paper read at a recent meeting of the Portland Medical Club.

The subject of antiseptics has been talked and written about so much of late, and appears in some form or other so frequently in our medical journals, that I doubt not, you wonder why I should attempt to interest you on this well worn topic. My excuse is I have so frequently seen some of my medical friends so slack, to my mind, in the observance of some of the very important measures in ordinary and every day practice, that I have wondered that satisfactory results were obtained even after an unnecessary delay. Another reason also which prompted this subject and has caused me to observe those I have come in contact with, in general, as well as special ways, with perhaps a more critical attitude, is the fact, that I have in my feeble attempt to practice one profession, been severely and openly criticised along that line. And as I have always wished to improve my knowledge and ability in all honorable ways, I have quietly tried to profit by the works of those who from their positions of success and renown, had I presumed, acquired a superior knowledge of what was necessary for the proper protection of their patients, and I must confess to disappointment on several occasions at the apparent carelessness of some of my critics in the observance of antiseptic precaution and care.

First: In our office work how many use, and have prepared suitable solutions or



means for sterilizing hands, instruments and dressing if required on short notice, or take the precaution to sterilize the hands before making even a digital examination when perhaps the os uteri may be eroded or inflamed with the mucous surface broken in many places.

I must confess that in quite a number of instances where I have been for various reasons, permitted to observe such examination, I have rarely seen any antiseptics employed. I claim that in every instance the hands should be not only washed clean in soap and water, but that some suitable antiseptic should be employed to cleanse and sterilize them before the simplest examination of the vagina or other parts, where the skin or tissues are liable to be broken or avenues for the taking up of septic material are liable to be open and ready to receive the same, and certainly no one can deny the necessity of sterilizing *after* such an examination for not only our own protection, but also for the protection of patients who follow. I believe if facts could be ascertained that the methods employed in the past in the practice of minor ordinary office gynecology were responsible, not only for the continuance of the troubles, but actually for increasing their severity, and ending ultimately in some operation which would otherwise have been unnecessary.

Another class of cases in minor surgery such as opening of abscesses in various localities, or removal of small tumors or growths, demands as much care and proper observance of the use of antiseptics in order to procure the best results as many more important and so-called major operations.

I do not presume any one today, who attempts to practice obstetrics would think of approaching a case without first considering whether his condition warrants it, or without being prepared to make his condition, hands, etc., as near aseptic as possible. Yet I have had the honor to have been called to assist in several cases, where the attending physicians' methods were devoid of antiseptics of any kind.

Now the majority of obstetrical cases get up fairly well, with ordinary care, and yet I claim that we should not run the risk of infecting our patients, or in any way adding even a possibility of such by permitting our obstetrical outfits to become deprived of some suitable antiseptic ready for use even in emergency calls. Another often noted absence of proper antiseptics has been in medical cases. I think that no one will deny the importance of destroying the disease pro-

ducing germs of typhoid and kindred bowel troubles, and yet how many physicians—even in these enlightened days—order the use of some suitable antiseptic or employ some other means to prevent the possibility of infection in every case of such a nature. My experience is and has been that a large per cent. of bowel discharges are carelessly disposed of, soiled towels and napkins often going into the general receptacle for soiled clothing, and permitted to dry and the material upon them becomes disseminated through the atmosphere of the place, and frequently the pantry, dining-room and kitchen. Is it not a *physician's* duty to instruct and direct the proper care and disinfecting of such articles?

One very common and careless proceeding I have frequently observed in the sick-room is the failure to properly cleanse and disinfect the every day used fever thermometer. How many times I have seen a physician remove it from its case and at once introduce it into the patient's mouth without even making a pretense of cleansing it, then taking it from the mouth and carelessly wiping it upon the sheet, pillow slip or any convenient article that chances to be handy, replace it and thus introducing into the thermometer case, particles of whatever chanced to adhere to it while in the patient's mouth. I claim this is more than carelessness, for almost anywhere water can be procured sufficient to at least wash off the glass. I always cleanse my thermometer before and after using, and if the case be one of any infectious character, cleanse it with alcohol or some antiseptic before again using it. In fact very many of my families or patients are provided with their own instrument and instructed how to at least keep it clean.

Another frequently carelessly employed instrument is the hypodermic syringe. What a chance is offered for infecting the patient when a soiled needle or instrument is employed or uncleansed surface is injected, and oftentimes what suffering and disturbance could have been prevented by a little care beforehand in this direction.

What is more liable to contain dirt, germs and infectious material than the ordinary cake or piece of soap as it is usually found in the sink or in the bath-room, and yet how frequently employed to lubricate the hand for examinations of internal cavities, or worse still a catheter and this last too may not even been washed or cleansed since last time used. Do you wonder that cystitis and urethral irritation results oftentimes from the introduction of such an instrument?

and yet I doubt not, that many of you have seen at least the same thing happen. I have.

Of all the instances I have mentioned I believe, that, carelessness in using catheters to be one of the most serious and conducive to more real lasting disturbance than almost any other, and yet so easily prevented by a little thought and the proper observance of antiseptics and asepsis of hands, patient and instrument.

The days of carrying a tongue depressor in the trousers' pocket with the jack knife which is used for every purpose—from manicuring the toe nails to dispensing of powders, filling pipes, etc., I am happy to say are among the past in a degree, and yet I can recall the consulting physician gravely drawing the same from his pocket and carefully wiping it on his pants on their posterior aspects or some similar article of cleansing propensity, and examining the throat of a croupy child, or a case of that dread disease "Kanker rash, scarlet fever and throat distemper," then wiping it again on the sheet, usually replacing it ready to dispense a good dose to the next patient seen, who chanced to complain of a sore throat.

Those were the good old days that we quite often hear referred to by our friends who believe not in the necessity of antiseptics, etc.

The ever present pocket case even at the present time I am sorry to say is too often brought into use for various purposes, from lancing the baby's gums or snipping the tongue tie of the same, to the opening of a boil or removal of a foreign body without even a pretense and sometimes the opportunity of cleansing. And yet a little care and preparation of the same pocket case, can make it nearly aseptic and kept ready for emergency use.

The matter of vaccination is another frequently carelessly performed operation of a minor character, and yet possible of most grave results, when proper care is not exercised in the preparation of the arm or part selected. Given a pure virus and a proper observance of asepsis in all particulars at the time, and full and explicit directions for the care afterwards, the protracted septic ulcer can be avoided with its attendant danger and annoyance as well as the unsightly scar following.

The carelessness, in many cases due undoubtedly to ignorance, on the part of patients, and attendants, in the use of dishes, towels and other articles in a sick-room, could and can be rectified to a great degree by the timely advice and teaching of the

physician, to the great advantage of all concerned. How very many times you have seen a soiled glass or spoon produced for measuring or administering medicine or nourishment, or the attendant tasting or sampling before offering the same to the patient from the same dish or spoon regardless of condition of mouth or lips. Infants are constantly, even by one experienced attendants, subjected to danger of infection from sources of like character, for the reason that they cannot rebel against, or refuse to do what you or I would shudder to be obliged to do.

In the treatment of tuberculous patients, especially of pulmonary type I feel we are not careful enough in directing regarding the care and disinfection of the sputum and other discharges. You can but agree with me I think that the masses of the people are ignorant of the true cause of consumption or if not ignorant do not fully understand or appreciate the true facts. It seems to me that in this disease alone a physician can feel well repaid by the gratefulness displayed by intelligent people when informed of the need of care for the protection of themselves and friends, and instructed how to procure such protection. In fact I think in ordinary catarrhal affections of the air passages and bowels greater care should be urged and freer use of antiseptics than is usually employed.

Referring once more to obstetrics—how much trouble and annoyance have you all experienced from the same careless way of caring for the breasts of the nursing mother or the use of a dirty disease-infected syringe in the hands of an absolutely septic nurse. And yet, whose duty is it to direct with a firmness that cannot be mistaken, all of the details and apparent minor, but nevertheless important matters necessary to the proper and successful recovery of your patients?

There is no need of a great display of wisdom or lectures of rhetorical eloquence regarding the proper observance of ordinary care and use of such antiseptics as may be directed by the physician; but good plain talk and directions given in a manner to carry conviction of their importance, will change in a large per cent. of cases, the carelessness to carefulness and consequent results be greatly improved and accidental annoyances prevented. Prevention along all these lines is of equal if not more importance than correction of the error committed.

There are many other instances which occur to me and will to you of like character, but I will refrain from enumeration. But

with the means which we have now at our command of sterilizing and cleansing our hands, instruments and patients, and protecting not only the afflicted but preventing others from becoming so—any physician who does not take advantage of these means is criminally negligent and does not fulfill his duty as a physician or surgeon.

The second topic I will now weary you with and which enters into this "Medical Hash" is "One cause of dyspepsia not usually recognized."

We are perhaps as frequently consulted in our offices by patients suffering from so-called dyspepsia or indigestion as any other one disease. I do not purpose to go over the ground of stomach troubles even of a functional character, but to call your attention to a class of cases that have drifted from one office to another getting some help for a time, but relapsing after a time to their former condition, particularly if by chance they contract a cold, and loosing faith and courage give up for a time until some mutual friend sends them to you to see if anything can be done for them.

I cannot at this time give any special set of symptoms which will at once direct your attention to the cause, but usually you will find they come under the head or class of patients often spoken of as nervous dyspeptics.

I refer to irritation of the naso-pharynx due perhaps to a general catarrhal state or hypertrophies of the nose and pharynx or even abnormal growths in either or both cavities. I have seen within the last year or more several cases, some of which I recall readily, where the distressing condition of the stomach was removed and normal digestion of ordinary diet was established, to the great relief and joy of the patient, by treatment directed entirely to the existing trouble in the nose and adjacent parts, without any remedy being given for the apparent stomach or bowel trouble. I do not attempt to give you any explanation or reason for the same, other than the prevention of a constantly irritating discharge from these parts which has been passing into the stomach, and also a relief of a source of constant nervous irritation from bad breathing, etc., nevertheless the fact remains and is established in my own mind that naso-pharyngeal catarrh and irritation from various sources is a frequent cause of functional disturbance of the digestive organs.

I will cite one case only, but can recall quite a number of others of nasal disturbance

of different character which were equally as positive in results. This was a case of a gentleman residing in Westbrook, who had for several months suffered from distress in stomach after eating, often vomiting, and in fact presenting many very prominent symptoms of gastric irritation, even to a degree resembling malignant disease of stomach; resulting in loss of flesh and strength to a degree to compel him to give up his work, and finally developed a distressing cough accompanied by considerable expectoration. He consulted and was treated by several physicians of high standing, for his apparent trouble, but scarcely realizing any benefit or even relief, and in fact was not retaining his food one-third of the time.

He was brought to my office by his son whom I had previously attended, and upon a careful examination I found he was suffering from nasal-polypi—not to a degree to obstruct breathing sufficiently to attract attention; but to produce and keep a constant flow of a muco-purulent material which the back of the throat was bathed in.

Having seen similar cases relieved by correcting the existing diseased condition, I told him I felt that perhaps some of his trouble was caused by this condition, and advised removal of the growths, but he thought he could not submit to an operation, and wanted me to prescribe for his cough and stomach trouble, which I did under protest, but told him I did not think he would derive any permanent benefit until he had his nose properly treated. He went home and remained about a week or ten days, when he came again and said, if I would do it myself he would consent and try to have the operation done. (I had advised him before to consult a specialist.)

After cleansing as thoroughly as possible and putting the tissue under the influence of cocaine, I removed the growths with ordinary snare and curret, asking him to return within a few days. On his return he said he had not vomited after the second day and was feeling better. Under ordinary tonic treatment and keeping the naso-pharynx cleansed he completely recovered from his stomach trouble and claims at the present time to be better, and certainly appears so.

I have never seen but one mention of this subject in print and cannot now recall the writer, but it was in one of our standard medical journals. I would have been glad to have given the journal and author's name, as his article was of deep interest for he entered into the discussion of the subject

and gave data and cases to substantiate the same.

At any rate I find it helps me many times in the treatment of these cases of stomach troubles, to give attention to any existing disease of the upper air passages.

I have gentlemen, but one more ingredient to add to our dish—and while it is of perhaps equal importance in some ways as the proceeding, yet I do not care to torment you much longer. I will briefly mention the same and trust that interest enough attaches to it, to cause you to take up the subject in the form of discussion. I refer to the treatment of typhoid fever.

It has fallen to my lot during the last year to treat and care for a few cases all of which I have treated practically the same. I have used what I do not as rule like to do, a commercial preparation of coal tar derivation, with certainly better results than I have ever seen. I refer to "Thermol." I have given this in from 3 to 5 grain doses every three or four hours until temperature was reduced, then such dose as I found needed to keep it at a safe point. I have used also in most cases a mixture of ammonium carbonate and aromatic spirits in small doses. In some cases when the pocket-book would permit, liquid pepton with creosote perhaps three or four times in twenty-four hours, and a liberal diet in all cases. I have never had cases, which started in as they did in some instances, in so severe a type, do so well and make so perfect convalescence.

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#### NEW YORK ACADEMY OF MEDICINE.

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##### Meeting in Charge of Section on Orthopædic Surgery.

(Stated Meeting, March 20, 1902.)

ROBERT F. WEIR, M. D., *President.*

Operations for the relief of paralytic deformities, with special reference to tendon transplantation, was the subject for discussion.

Dr. Royal Whitman read the opening paper, entitled, "Introduction; History; Indications for Operation."

He introduced the subject with a brief account of the objects of tendon transplantation, arthrodesis and their combinations.

He said, with regard to tendon transplantation, that as each muscle had an essential function, its loss could never be entirely replaced; therefore, even practical cure by

this means was possible only when the paralysis was very limited in extent.

The operation was essentially palliative rather than curative, but as a means of lessening the tendency toward deformity and of improving function it was often of great service.

The actual results of the procedure had been obscured by premature and exaggerated reports of successful cases, but a careful study of the relation between the function of the normal part and the degree of disability would indicate what could actually be accomplished.

The original operation of Nicoladoni, of transplanting the two peronei tendons into the tendon Achillis, was of value in lessening the tendency toward deformity, but it was absurd to propose to replace the function of the great calf muscle by two feeble muscles working at a disadvantage. The same criticism might be made of the attempt to make one muscle perform two different acts at the same time, as when a portion of the calf muscle was attached to the tibialis anticus with the aim of aiding dorsal flexion. Nor was it reasonable to suppose that a weak muscle could carry out its own function and at the same time that of a more powerful neighbor, as in the original operation of Parrish, in which the extensor proprius pollicis was attached to the tendon of the paralyzed tibialis anticus.

Of the various modifications of the technique of tendon transplantation that advocated by Lange of relieving a muscle completely of its former function and attaching its tendon directly to the periosteum at the point of greatest usefulness was perhaps the most important.

In the treatment of cerebral palsy, the relief of persistent palmar flexion of the hand by transferring the flexors of the wrist to the extensor aspect was a valuable application of the procedure.

Arthrodesis occupied a much more limited field. As a means of replacing apparatus it was by no means sufficient, since deformity usually recurred after the operation at the knee and hip, and even at the ankle joint, when the part was unprotected. In exceptional instances it might be performed with advantage in the upper extremity.

The combination of tendon transplantation with arthrodesis or other operation was often of service. For example, the most effective procedure for the relief of paralytic talipes calcaneus, especially of the valgus type, was removal of the astragalus, arthrodesis, backward displacement of the foot and transplan-

tation of the peronei tendons to the os calcis, a treatment that he had thoroughly tested.

The operative treatment of severe paralytic disability must be conducted with the aim of supplementing rather than supplanting mechanical support.

A paper entitled, "Deformities due to muscular paralysis method of production; possibilities in tendon transplantation; combinations that have been made to correct deformity," was read by Dr. W. R. Townsend.

He described the method of production of these deformities, spoke of possibilities of the operation and quoted from current literature the various combinations that had been employed by different surgeons.

He presented a young man, a patient, upon whom he had operated two years previously, who had extreme drop wrist. He divided the palmaris longus, flexor carpi radialis and flexor carpi ulnaris where they entered the annular ligament, passed them through the inter-osseous space just above the pronator quadratus and fastened them to the extensor digitorum after shortening the latter by folding it upon itself. At present there is no drop wrist and patient can extend the hand and flex the fingers very well.

Dr. V. P. Gibney read a paper entitled: "Technic of Operation and Results obtained at the Hospital for Ruptured and Crippled."

First operation was performed at the hospital July 7th, 1896, upon a girl 10 years of age, whose polio-myelitis developed at age of one year. She had equino-valgus with complete paralysis of the tibialis anticus. The tibialis anticus was exposed along with the superficial tendons in the dorsum of the foot, the tendon at its insertion divided and passed through slits in the exterior proprius hallucis and over and under the division of the extensor longus digitorum. It was sutured to these by means of silk, wound closed with cat-gut, sterile dressings applied and the foot was put up in moderate calcaneo-valgus position after division of the tendon achillis.

At last word, six months after operation, there was still a little valgus; muscles acted fairly well, yet weak. There was no limp.

Since that time, 92 operations had been done for the transplantation of tendons and muscles by the different surgeons connected with the hospital.

The technic followed differed little from that employed elsewhere except in this particular—the skin incisions were along the vertical axis of the limb instead of the transverse or oblique.

He emphasized importance of thorough aseptic work and making the incision not

larger than absolutely necessary to handle the tendons. It was better to make two or more incisions and tunnel between these for passage of tendons rather than extensive subcutaneous dissection. The sheath of the tendon should be divided longitudinally, and at the conclusion of the transference closed again with fine cat-gut.

Primary union was essential. It was safer to avoid touching the tendons for purpose of examination or section, fine needles with silk being passed through the ends of tendons and then covered with sterilized gauze until ready for transplantation. The pinching of tendons with urinary clamps or thumb forceps or other instruments was to be avoided.

A very important detail of technic was a thorough anatomical knowledge of the tendons, their points of insertion, their relations one to another, and their action.

Statistics did not yet show which was better, grafting or transplantation of one tendon into another tendon, or into bone or periosteum—never desirable to transplant a lifeless tendon into a live one, but the live tendon should be transplanted into the point of attachment of the lifeless one. Suturing of tendons together not always sufficient; where possible end of tendon should be passed through button hole of another, end spread out and quilt suture employed.

After tendons had been transferred, after the lengthened tendons had been shortened by looping or saturing or by sectioning and overlapping test of position of foot should be made. He had discarded Kangaroo tendon for tendon suturing owing to size and was employing silk.

Unnecessary to employ drainage, save when extensive dissections were made, when he employed small drain for 48 hours. The hand or foot was put in a position of over-correction and fixed with plaster of paris bandage; parts not disturbed for two weeks, and even if healing was per priam, position maintained for some weeks, apparatus subsequently used for many months.

Of the operations, 24 for equino-vulgas, 18 for calcaneo-valgus, 5 for valgus, 19 for equino-varus, 12 for equinus, 3 for calcaneus, 10 for hemiplegic drop wrist, 5 for dangle leg, and one for congenital deformity of the thumb. With so many operators, at all times exercising the greatest liberty, combinations of tendons would suggest themselves. The aim, however, had been to correct deformity, to place tendons where deformity could not easily occur and where best functional results might be expected.

The operations for correcting drop-foot and

valgus had varied—a very common one was to make an incision  $1\frac{1}{2}$  inch in length along the dorsum of the foot beginning at tibio-tarsal joint and extending downward. Separate the skin beyond the extremity of the incision down to the tibialis anticus, divide the tendon, separate carefully from the underlying parts, pass it through a button-hole about the middle of the extensor proprius hallucis and let it terminate among the divisions of the extensor longus digitorum. The operation was often supplemented by subcutaneous division of the tendon Achilles. When one was desirous of raising the outer border of the foot, either the whole or part of the tendon of the tibialis anticus was extended to the peroneus tertius and brevis.

An operation frequently done when marked valgus existed and when the tibialis anticus was completely palsied—a part of the extensor proprius hallucis was passed through the tendon of the tibialis anticus and sutured into the posterior tibial at its insertion. Through same incision the tendons of the extensor longus digitorum might be shortened by overlapping and suturing.

Two cases presented feet with muscles so much paralyzed that through the anterior vertical incision, tendons along the front of the foot were shortened and sewn firmly to the annular ligament so as to limit motion. The result in one at end of  $1\frac{1}{2}$  year was fair, that is, the patient could make voluntary flexion to 90 degrees without abducting the foot. In the other case the result was negative—by negative he meant a condition in statu quo ante.

The technic of the operation for relief of drop-wrist was yet incomplete. The procedures thus far employed were lateral incisions, one over the radial border, and one over the ulnar border with detachment of the flexor tendons and the insertion of the same into the extensor tendons. Again, the anterior and posterior incision about the middle and lower third of the fore-arm, then dissection through the inter-osseous space so that the flexor tendons could be transmitted to the extensor tendons. There had been five cases with one good result, two fair and two negative. In the earlier operations there was cicatrization in the inter-osseous space between the tissues in this locality and the tendons passed through. In two instances he attempted to meet this difficulty by implanting a scroll of celluloid in the inter-osseous space, removed it at end of four weeks to find tissues growing into the ends of the scroll. In one case he had used a solid cylindrical piece of celluloid in the inter-

osseous space, removed same at end of three weeks and found a patulous opening through which he passed the proximal ends of the flexors and sutured them into the extensor communis digitorum, with good results.

Of the 92 cases operated upon, he had succeeded in tracing and getting final results in 69.

Good results were obtained in 82 per cent., fair in 44 per cent., negative in 24 per cent.

Dr. Gibney further described the technic of a case of calcaneo-valgus with complete paralysis of all the posterior muscles—and the operation for dangle leg with report of five cases.

Dr. Gibney presented nine patients showing the results of various operations for tendon transplantation and arthrodesis performed by Drs. Townsend, Whitman and himself. The technic and results in these cases has been covered in the above abstract.

Dr. Joseph Collins read a paper entitled, "Some Neurological Questions Involved in Tendon Transplantation," in which was pointed out: 1. The necessity for the more careful and persistent treatment of cases of anterior poliomyelitis, principally by the hypodermatic use of strychnine and by massage, in order that the natural irritability of the muscle fibre be continued as long as possible. 2. The necessity of differentiation as to causation and morbid dependency of the different forms of cerebral palsies in order that appropriate cases for tendon transplantation or other operative procedure might not be allowed to go unaided; and 3, the neuro-mechanism of tendon transplantation. These, as well as the psychological questions involved, were explained by word and diagram. In conclusion, Dr. Collins urged that the operation of tendon transplantation for function transference be given a wide scope of usefulness through more frequent employment of it, especially in cases of cerebral palsies.

Dr. R. H. Sayre said, that the patients and the papers produced had presented the matter very clearly and that there was little to add to either the theoretical or practical sides of the subject. In his own experience, he had had some very satisfactory results and others that were poor. In some instances, more power had been gained than was anticipated, and in others there had been a stretching of tissues so that there was a partial return of the original disability.

Dr. B. Sachs considered the view taken by the readers of the papers very encouraging; many of the cases usually deemed hopeless were in reality capable of improvement;



the operation was rational and he thought operative procedure applicable to cerebral spastic cases as well as to infantile spinal cases. He said the difficulty in operation lay in determining exactly which muscles were over-acting, and which were under-acting, and the failures in determining this accounted for a great many of the negative and poor results.

Dr. Jacob Teschner remarked that he was pleased to hear that a more favorable prognosis should be given polio-myelitis, according to Dr. Collins. His aim in treating long-standing polio-myelitis (three to twenty years duration) had been first to build up the muscles to their highest possible capacity and then to determine whether or not operation would improve matters. In many cases he had found operative treatment unnecessary after such treatment. He agreed with Dr. Whitman in that no operation should be undertaken until at least two years after onset of the paralysis. As to the treatment referred to, he quoted from a paper of his in the *Annals of Surgery*, No. 1899, his views not having changed.

Dr. Henry Ling Taylor said it was to be remembered that tendon transplantation was still in the experimental stage, and that final conclusions could not yet be given. The idea that any paralytic foot or hand could be improved by tendon grafting and that apparatus could be eliminated was not founded on experience; in properly selected cases the procedure was of undoubted value. A very fair and conservative presentation of the subject had been given.

Dr. Russel A. Hibbs read a report of tendon transplantation operations performed at the New York Orthopedic Hospital. While the ultimate results had not been so good as the immediate ones, the operation seemed justifiable, for it made apparatus more effective. He thought the operation would probably prove to be an adjunct only to mechanical treatment.

Dr. T. Halsted Myers said the results recorded at the meeting were unusually good and encouraging; he considered it interesting to note that there had been no bad results. He believed the upper extremity offered a field for better results than the lower. He asked if, in transplanting flexors or other tendons, any valuable motion had been lost in these cases. He thought the removal of deforming contractions of equal importance with the increase of power.

Dr. Townsend replied that the original action of the tendons was destroyed.

## ANÆSTHESIN.

(Para-amido-benzolcacidester.)

### A Local Anesthetic.

By PROF. CARL VON NOORDEN.

The ethyl-aster of P-amido-benzoicacid



was first prepared by Dr. E. Ritsert, of Frankfort on the Main in 1890, and was recognized by him as a non-toxic local anesthetic. Although this substance aroused great interest among various pharmacologists as a member of a hitherto unknown group of anesthetics, and was especially welcomed by Filehne as a confirmation of his theory of the anesthetics action of the benzoyl group, clinical proof was lacking because of the difficult solubility of the substance in water, which thus afforded no prospect of fulfilling the long cherished desire of securing a non-toxic substitute for cocain. Some seven years later Meta-amido-p-oxybenzoic-methyl ester (orthoform) was prepared by Einhorn, and despite its insolubility in water was introduced into therapy; whereupon it now became advisable to subject the forgotten amido-benzoicacidester to clinical examination, and all the more so because orthoform had been criticised for irritating quality and the relative toxicity which proceeded from its phenol-characteristics. It was expected that these unpleasant collateral effects would be much less noticeable in the case of an amido-benzoicacidester, which was designated Anæsthesin.

Dr. Ritsert gave this preparation to me some two years ago; since which time I have used it uninterruptedly, and possess a very extensive experience with the agent.

Anæsthesin is a white powder, without odor or taste. When placed upon the tongue a sense of numbness results. The drug is soluble with difficulty in cold water, somewhat more freely in warm water and very freely in alcohol, ether, chloroform, acetone, fats and oils. It may be mixed with fats of all kinds to form ointments without undergoing decomposition.

At my request, Prof. Benz, of Bonn, instituted certain animal experiments in order to test the toxicity of Anæsthesin. One of these experiments may be cited in this connection.

Anæsthesin, to the amount of 0.6 gm. (10 grs.), was administered to a rabbit in 20 ccm. of an oily solution, by means of



the stomach tube. On the following day the animal was found in good health with urine normal.

The combined experiments which practically resulted negatively, show that in moderate doses Anæsthesin exerts no deleterious influence upon the animal organism. Given even in colossal doses, the only notable effect is a transient methemoglobinemia. Renal irritation and methemoglobinuria were never observed. The toxic action of Anæsthesin is therefore seen to resemble to some extent that of phenacetin to which it is chemically related; and it appears to be strongest when the drug is dissolved in oil.

Prof. Kobert, of Rostock, also tested the drug in regard to its toxicity. His studies show that Anæsthesin is non-toxic, and that it may be used clinically without reservation.

Further research will be required to determine why the anesthetizing power on the sensory nerve. We know that if the undissolved powder, finely divided, is applied directly to an exposed nerve-trunk, the electrical excitability of the nerve is not depressed thereby, nor is the sensibility of the area supplied by the nerve in any way modified (Binz). These investigations should be repeated with oily solutions of Anæsthesin. Thus far no unpleasant collateral effects have been noted in connection with any method of exhibiting Anæsthesin. There is, therefore, no necessity to cite individual cases, as a general summary will suffice to give the indications for the new remedy, as thus far determined.

Anæsthesin may be given by the mouth in powder form 0.3–0.5 gms. (4 to 7½ grs.), two or three times daily, for hyperesthesia of the stomach, by which term is understood the painful sensation which follow the ingestion of food, including nausea. Most of these cases could be described as nervous dyspepsia, although some instances of gastric ulcer were present. In this class of cases Anæsthesin proved to be at least the equal of chloroform-water, chloralhydrate and orthoform. In a few instances it was superior to any of the latter in intensity and duration of action. I would suggest that in cases of this sort the Anæsthesin should be given from 10 to 15 minutes after the ingestion of food. The highest daily dose given was 2.5 gms. (37½ grs.). The direct administration per os also includes the use of Anæsthesin in the form of lozenges, etc., for cough and dysphagia. The dose in each lozenge, gumdrop, etc., should vary from 0.02

to 0.04 gm. (½ to ¾ gr.). When the irritation is located in the pharynx or entrance to the larynx, the action of the drug is extremely sedative, resembling that of the so-called "angina-pastilles," which contain antipyrin and cocain, but lasting much longer. The patients, including many with tuberculous laryngitis, preferred the Anæsthesin lozenges to the pastilles. An emulsion of Anæsthesin (10 per cent.) in water and gum tragacanth, a 3 per cent. solution in 45 per cent. alcohol and direct insufflation of the powder, were all used in hyperesthesia of the larynx in order to determine the relative efficacy of the new drug with orthoform. Anæsthesin was found to possess all the anesthetic properties of orthoform and to be quite free from irritation. The author found that insufflation of the powder produced the best effect, and that in this form Anæsthesin is the best known anesthetic for the larynx.

In suppository form 0.2–0.5 (3 to 7½ grs.) Anæsthesin to 2.0 (30 grs.) cocoa butter, the drug was tested in tenesmus and painful hemorrhoids. For tenesmus it was found inferior to the opiates and belladonna preparations. But for painful hemorrhoids Anæsthesin gave remarkably good results. Not only were the pain and pruritus favorably affected, but the hemorrhoids were essentially reduced in size. The superiority over orthoform was marked.

Exhibited in the form of soluble bougies 0.3 (5 grs.) Anæsthesin in each, the new drug was used in non-specific vesical tenesmus in three females, by introduction into the urethra. In each case the results obtained were highly satisfactory. The treatment was of short duration. Too much should not be claimed for these results, as simple cocoa butter bougies are sometimes sufficient to relieve this condition. The results obtained from the use of the Anæsthesin (10 per cent. Anæsthesin in lanolin) in certain forms of pruritus were brilliant, and more especially in the pruritus vulva which accompanies diabetes. The author has treated over a dozen cases in which the tormenting symptoms with their attendant phenomena of insomnia and nervous excitement were relieved. In cases of this type the strictest diet, the complete disappearance from the urine of glucose and the exhibition of asperin were all without effect. Cocain ointment, even in toxic doses, failed to produce more than a transitory improvement. In all these cases, without exception, the Anæsthesin ointment brought about rapid improvement, and when

its use was prolonged, a permanent cure resulted. Anæsthesin was also used in chronic perianal eczema, eczema of the scrotum, etc., with similarly good results. Decided improvement in the pruritus appeared to influence favorably the disease itself, although it may simply have indicated that a cessation of itching led to the omission of scratching. Anæsthesin ointment was found to be very efficacious in recent intertrigo.

Finally it should be mentioned that Anæsthesin was of value in a certain number of cases of icteric, nephritic and senile pruritus; in certain cases—especially in icterus—the results were strikingly good. It must be admitted that complete failures were recorded.

In brief, Anæsthesin has an undoubted anæsthetic action in many and varied conditions without any known drawbacks. It is especially devoid of irritating properties. —*Berl. Klin. Wochensh.*, April 28, 1902.

#### Keep the Fingernails Long.

By R. ORTEGA, M. D., Porfirio Díaz City, Coahuila, Mex.

In *Le Monde Medical*, January, 1901, page 6, in treating of the antiseptics of the surgeon, it says:

"Let us cut the fingernails as short as possible and keep them very clean."

All authors recommend the same thing, and, indeed, in my humble opinion, I think that all say it by routine, without having reflected that fingernails cut very short are the easiest to be infected and the most difficult to clean, and I proceed to prove it:

It is apparent to every one that a file is more easily clogged the finer it is, especially if used on soft substances such as lead, copper, etc., and all because the particles of metal suffer sufficient pressure to be compressed into the bottom of the angle formed by its cutting blades.

Now then, let us compare the cutting blades of the file with the fingernails of the surgeon—which I think rational—and we shall have to agree that the grime, finding easy access to the angle formed by the fingernail with the tip of the finger, and receiving pressure that incrusts it there, pressures that are the stronger the shorter the fingernail is, will form concentrated deposits of micro-organisms difficult to dislodge.

It does not happen so with the fingernails

long; when these scratch dirt, it remains sticking to the end, and if there is much and it reaches the bottom of the digito-ungual crease, the pressure cannot be exercised sufficiently nor with such frequency as to incrust it in a tenacious manner.

On the other hand, he who has long fingernails does not need to use any instrument to clean them; with the thumbnail the others of the same hand may be cleaned when the grime remains at their ends, and with the fingernails of one hand those of the other when the dirt reaches the bottom of the crease. So that he has a nail-cleaner so at hand that it forms part of it. I am frequently asked: "Doctor, what do you do to keep your fingernails so clean when you have them so long? I answer by having them so."

From another point of view, to those who consider long fingernails as offensive arms, I say that they are mistaken. I suppose they will not condemn razors or needles, because if unskillful persons are capable of cutting their throats, or at least skinning themselves with the former and pricking themselves with the latter, barbers with those, tailors with these, and surgeons with both can work without harming or being harmed.

Neither do long fingernails interfere with feeling, percussion, etc. One feels and hits with the tip of the finger.

Practice does everything; one accustoms himself to use the razor, the needle, etc., without injuring or being injured. Why should not one become accustomed to using the fingernails with much more ease, as these grow slowly, and insensibly one habituates himself to their use? Long fingernails even offer other advantages. A needle, a thread of silk, a hair, etc., can be so easily picked up without having to make use of pinchers, as I have seen several surgeons have to do who have very short fingernails. What better instruments to scratch papillamites, fleshy excrescences, etc., in all those places that the end of the finger can reach? There is only one objection to them, and that is that they become too soft during prolonged, very prolonged, operations, and this provided that during them one keeps the fingernails in constant contact with liquids. But, is this really an objection? No; for they only cease to be useful while they are soft.

Therefore, I am of the opinion that the surgeon ought to have fingernails from three to five millimeters long, leaving those of the thumbs and little fingers from six to eight.—*Red Cross Notes.*

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PORTLAND, MAINE, AUGUST, 1902.

## Editorial.

### Edebohls' Operation.

In endeavoring to improve upon the methods devised for anchoring a floating kidney, Dr. George M. Edebohls, of New York, found that in case of patients who had presented some of the symptoms of chronic Bright's disease before operation, the latter were benefited by the nephropexy. The albumin and casts disappeared from this patient's urine and his general health improved. As time went on, among the many patients upon whom the operations for floating kidney were performed, were some patients who had advanced Bright's disease, and these were found to be greatly benefited by the nephropexy, and four out of six cases of this sort seemed to be entirely cured. Pleased and encouraged by such unexpected results, Dr. Edebohls did not hesitate to perform nephropexy upon every patient in which the operation was indicated, even if one or both kidneys was affected with chronic Bright's disease.

The results at the present time are as follows: Of 191 patients upon whom he has performed nephropexy, there were 16 who had chronic nephritis, in 8 cases affecting but one kidney, and in 8 others both kidneys were diseased. In all these cases great

improvement in the symptoms and general health followed the operations and 8 of these patients who have been under observation, from one to eight years, have shown no signs of recurring nephritis and have remained in good health. The diagnosis of nephritis was made positively in each of these sixteen cases by the previous history of the patients, by chemical and microscopical examination of the urine, and lastly by the critical test of actual inspection and palpation of the kidneys at the time of operation.

The essential features in Edebohls' operation as now performed are as follows: The kidney is carefully separated from its fatty capsule and drawn up, if possible, through the outside wound. Next the fibrous capsule is carefully stripped off the kidney, reflected towards the pelvis until the entire surface of the kidney lies raw and denuded. The stripped off capsule proper is then excised close to its junction with the pelvis of the kidney. If the kidney cannot be delivered through the outside wound the operator should, of course, do the best he can to peel off the capsule with his fingers and remove as much of it as possible. The raw and denuded kidney is then dropped back into the fatty capsule and the external incision is closed. No drainage is used except when the parts are extremely edematous. The death rate from Edebohls' operation has so far been *nil*, and every patient, even

when suffering from chronic Brights' disease of both kidneys, has recovered.

To what are the good results of this operation to be attributed? Dr. Edebohls' conclusions after quite an extensive experience are summed up as follows: The main object sought is to increase the arterial blood-supply to the deceased kidney. By this means a gradual absorption of the interstitial or intertubular inflammatory products and exudates is brought about, the tubules and glomeruli are freed from compression, contraction and distortion, and the regeneration of new epithelium capable of carrying on the secretory function is assured.

The fibrous capsule, especially when altered by disease, becomes an almost impenetrable barrier to the passage of blood-vessels between the kidney and the fatty capsule. The fatty capsule and the denuded kidney are both liberally supplied with blood-vessels, both are brought intimately together over the whole surface of the kidney by Edebohls' operation, and the necessary result must be the formation on an extensive scale of anastomoses between the blood-vessels of the two.

What are the limitations of this operation? Dr. Edebohls declares that he is prepared to operate upon any patient with chronic Brights' disease who has no incurable complications, or one absolutely forbidding the use of an anesthetic, provided that the patient without operation has a probable expectation of life of one month.

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#### Human and Bovine Tuberculosis.

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When Koch discovered the bacillus of tuberculosis the etiology of this disease was placed upon a scientific basis, and the germ theory of disease developed an additional importance to every physician. Hope was revived that something more potent for withstanding the ravages of this widespread and very fatal disease would be shortly forthcoming. A number of scientists began to study the life history and habits of this bacillus, and soon this knowledge, though failing in providing us anything like a specific for consumption, soon began to bear good fruit in better directed efforts to lessen the sources of infection.

Much attention was given to the subject of tuberculosis among the bovine animals, and well directed efforts were being made in almost every state to weed out tuberculous cows from our herds and to prevent

the sale of contaminated beef, butter and milk. Some considerable advancement had been made in lessening the spread of this disease, and even in reducing its deathrate, when at the last meeting of the Congress of Tuberculosis held in London, Professor Koch astonished the world and, for the time at least, disheartened his confreres, by his sweeping dictum that there was no intimate relationship between human and bovine tuberculosis. To be sure several physicians, members of the congress, hardly less distinguished in the same field of work than the professor himself, earnestly combated his theory and failed to be convinced by his argument, yet by reason of the eminence of the author his dictum received widespread recognition, and many were those who declared that the good work of lessening bovine tuberculosis had been largely done in vain.

Great, however, as was the respect in which Professor Koch was held by his confreres, his dictum was not to be accepted without further tests and proofs, and all over the world, in many laboratories, skilled bacteriologists dedicated themselves to the work of proving or disproving Koch's new theory.

About six years ago Professor Von Behring was elected to the chair of bacteriology at Marburg, and since that time he has devoted great attention to the subject of tuberculosis. During the past year he has zealously undertaken the task of determining the exact relation of bovine and human tuberculosis. In a recent paper he declares that he has repeatedly produced tuberculosis in cattle by infection with bacilli obtained from the sputum of consumption. He has also, on the other hand, demonstrated that bacilli taken from tuberculous processes in cattle are capable of producing the disease in such different animals as the guinea pig, the sheep, the dog and the ape, so that it seems reasonable to say that the bacilli of cattle tuberculosis will produce tuberculosis in man under favorable conditions.

Professor Nocard, of Alfort, one of the best known veterinarians, says that he has often seen susceptible individuals acquire tuberculosis while in attendance on cattle suffering from the disease. Professor Ravanel, of Philadelphia, after a series of experiments conducted for the State Live Stock Sanitary Board of Pennsylvania, sums up his conclusions as follows: "The evidence at hand forces us to conclude that human and bovine tuberculosis are but slightly different manifestations of one and the same

disease, and that they are intercommunicable."

At a recent meeting of the New York Academy of Medicine this subject was discussed and Drs. Jacobi and Janeway both insisted that they had observed cases in which the development of tuberculosis in children could be traced to no other source than the feeding of infected milk. Professor Theobald Smith gave an exhaustive review of the literature and experiments bearing upon this subject, and ended by saying that it would be extremely hazardous to put into practice Professor Koch's conclusions of the absolute distinction of the tubercle bacilli affecting man and animals, and that children especially by reason of their less vitality would surely be subjected to a serious risk if allowed to use the products of tuberculous cattle.

#### Vital Phenomena.

Of late much has been written in the newspapers and the magazines about the so-called wonderful experiments which Professor Loeb, of the University of Chicago, has been conducting, and the most extravagant claims have been made for his discoveries. It has been commonly stated that Professor Loeb had discovered the secret of life and that this secret was the long ago exploded theory that electric energy and vital force were one and the same thing. Professor Loeb himself had become thoroughly disgusted with the extravagant claims made for himself, had protested against the conclusions drawn, and had announced that because he had been made ridiculous before the scientific world by reason of the exaggerated and distorted reports of his work, made by pseudo scientists, that it was his intention to return to Germany, but in spite of the Professor's protestations and repudiations the accounts of his wonderful investigations and the still more wonderful results achieved have been enlarged upon and sensationalized until most people now believe that he claims to have solved the problem of life itself.

Professor Loeb has done a large amount of careful experimental work and has accomplished some notable results, but he is in no way responsible for the unjustifiable claim which the pseudo scientists have made for him, neither has his work given us any new insight except to further elucidate through what means certain forms of vital energy manifest themselves. In the present confusion that characterize the accounts of

Professor Loeb's achievements in the lay press, and by reason of the somewhat ambiguous language in which he himself details his own work, it is difficult to give anything like a lucid explanation, of what he has really demonstrated, but the facts elucidated seem to amount to this: That in dilute solutions of various salts the molecules of the salt instead of existing as such are really broken up into two parts, called ions, bearing electric charges, one part, the cation, being positively charged and is attracted to the negative pole, the other part, the anion, being negatively charged and moves to the negative pole. In a weak solution of sodium chloride the salt no longer exists as a compound, but has been broken up into a positively charged sodium-ion or cation and a negatively charged chlorine-ion or anion. This theory was not original with Loeb, but he has added some facts which help to uphold it. Starting with this basis the Professor seems to have worked out by experiments the following conclusions: Ions of different kinds produce different effects on cell protoplasm; some kinds of ions are favorable to certain vital processes, other kinds of ions are antagonistic to certain vital processes. Some ions, especially those of sodium, potassium and calcium, enter into combination with the protoplasmic proteids of cells, and in order to properly carry on the vital processes it is necessary that the ions be combined in the proteid molecules in certain definite proportions, varying in different cells and tissues, and that the proper ions in proper proportions be present in the circulating fluids,—blood in animals, sea water in marine organisms, chlorophyll in plants,—that bathe the cells.

Thus, Loeb found that marine animals cannot live in pure solutions of sodium chloride of the same concentration as that of sea water, but that the poisonous action of the sodium chloride was abolished by the addition of small amounts of calcium or potassium chloride. The same was the case with pure solutions of calcium chloride or potassium chloride. These facts were considered to show that all three kinds of ions are necessary in the composition of the protoplasm to keep the vital processes in operation; and that when the animals were placed in pure sodium chloride solutions the sodium-ions from the solution displaced and replaced the calcium and potassium-ions of the proteids and thus abolished vital phenomena.

Also, striped muscle of the frog was found

to exhibit rhythmic contractions in pure sodium chloride or sodium bromide solutions, but the presence of potassium and calcium salts inhibited these contractions; whence it was inferred that sodium-ions promote muscular contraction of this kind, while potassium and calcium-ions antagonize them, and that striated muscle would contract in the same way in the frog's body were it not for the antagonistic action of the calcium and potassium-ions circulating in the blood.

Similar results were obtained in the case of the rhythmic contractions of the hydromedusa, in which calcium and potassium-ions checked the movements, and the presence in the tissues of a certain proportion of sodium-ions (brought about by immersing the animal in sodium chloride or sodium bromide solutions) was necessary to bring about the contractions. An excess of sodium-ions also abolished the movements which could then be restored by adding calcium and potassium-ions.

Different tissues, in various parts of the organisms, and with differing special modes of manifesting irritability, contractility, or other vital powers, require the presence of different kinds of ions; for the exercise of their special vital properties the necessary ions must be present in certain definite proportions, which cannot vary beyond certain limits without abolishing those special activities.

The greatest general interest has been attracted by Loeb's success in effecting the development of the ova of seaurchins, without fertilization by spermatozoa, through the application of these principles. The ova of these organisms are ordinarily incapable of parthenogenetic development, or development without sexual impregnation. Loeb argued that this development would be favored by magnesium or potassium-ions and antagonized by sodium and calcium-ions, and that it is under ordinary conditions prevented by the composition of sea water, which does not contain the ions in the proper proportions.

He therefore experimented with a great variety of modifications of sea water, with varying degrees of success. Finally he found that by immersing the sea-urchin eggs for two hours in a mixture of equal parts of two-and-one-half-normal magnesium chloride solution and sea water, and then transferring them to sea water, the ova developed through the blastula and gastrula stage to the pluteus or larval condition in an entirely normal manner; only a smaller proportion of the eggs developed and the

development was somewhat slower than in the normal manner. The same effect was thus produced that ordinarily requires the agency of spermatozoa.

From this Loeb concluded that sea-urchins' ova contain all the elements necessary for development, but that their parthenogenetic development is prevented by the composition of sea water; either from lack of enough of the ions (magnesium, potassium, hydroxyl, etc.) that promote cell division, or from an excess of the ions antagonistic to this process, or both. In the ordinary process of fertilization Loeb considers that the spermatozoon furnishes to the ovum ions to supply those lacking or to counteract those antagonistic in the latter, or both. The spermatozoon may also carry in enzymes or other material. According to this view the ions, and not the nucleins, of the spermatozoon are the essential fertilizing factors.

Loeb also contends that it is the ions of the protoplasm of the nerve cell which originate nerve impulse and chemic action is the cause of nerve impulses rather than a mechanical stimulus. All this is very important if true, as showing the cause of the manifestations of vital phenomena, but it is very different from claiming to have discovered the essential principle of life.

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#### Educated Imbecility.

It was John Ruskin, if we remember aright, who once rose to maintain that educated imbecility and finesse foolishness are the worst kinds of imbecility and foolishness. If we may trust reports, some quaint and curious doctrines have emanated from Chicago University, but Professor Wm. N. Guthrie, in a recent article, seems to be entitled to the palm for straining after effect. It is reported that Professor Guthrie has considered it worth his while to try and prove that few men would be poets if they could do things with their hands. After reading his argument one might also be moved to remark that few men would be lecturers if they could do things with their brains. The professor insists that if Homer had not been blind he might have been a great worker, but he probably would not have been a great poet. It does not appear whether or not the professor considers this commendable in Homer, but the fact remains that many of our best poets, like Milton, Morris, Burns, Shakespeare, Lowell, Holmes and many others have been much more than mere dreamers and were men that did much

honest and honorable work in the world. The generalizations of Mr. Guthrie appear to border on foolishness, and in many respects they are untrue. According to his view poetry seems to be the recourse of those who are so unfortunate as to be unable to utilize their hands. In the light now shed upon this important question we are also able to see that "Poets nascitur, not fit," acquires a new significance for the poet is surely born, but born not fit to work with his hands. Most people have believed heretofore that poets did not carry the hod or push a jinrikisha in the street cleaning department because they had an especial aptitude for other work or preferred it. Because they had brains as well as hands. Men are not poets because they cannot do manual work, but they do not do hand work because they are poets. All this so savors of educated imbecility that it is hardly worth while, and yet it might well be questioned just for what reason men capable of such twaddle are permitted to pose as instructors of youth.

And now comes another apostle of jejunity who seems to have a plan by which poets are to be turned out of all our schools with neatness and dispatch. A Chautauquan lecturer out West has just advised parents to see to it that their children when they reach the age of nine years be set to work writing novels, poems and dramas. This sage contends that actual practice in every form of literary work is essential to a correct understanding of literature. The man seems to be serious, but he is unconsciously the greatest joker in Christendom. As if the world did not now contain enough deluded men and women who, affected by an itch for notoriety, are fully persuaded they are fore-ordained to write poems, novels and dramas, without a long suffering public having in prospect the endurance of the effusions of a legion of adolescent literary pretenders. If persons of sense and discrimination, under present conditions, find themselves longing for a lodge in some vast wilderness, what resource will be left to them when poems become as thick as leaves in Vallambrosa.

Between the theory that poets write poetry because they are not fit for anything else, and the idea that poets can be produced by a training in scribbling in our public schools, the public seems to have rather a dubious prospect before it. Meantime it might not be out of the way to inquire why this serious man with fantastic notions does not engage in some manual

labor and devote himself to hewing wood and drawing water instead of posing as a lecturer to parents and teachers.

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## Reviews.

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A TREATISE ON DISEASES OF THE SKIN. For the use of Advanced Students and Practitioners. By Henry W. Stelwagon, M. D., Ph. D., Clinical Professor of Dermatology, Jefferson Medical College and Woman's Medical College, Philadelphia; Dermatologist to the Howard and Philadelphia Hospitals. Handsome octavo of 1125 pages., with 220 text-illustrations, and 26 full-page lithographic and half-tone plates. Philadelphia and London: W. B. Saunders & Co., 1902. Cloth, \$6.00, net; Sheep or Half Morocco, \$7.00, net.

This book presents the practical part of the science of dermatology in a sufficiently full and complete manner to make the work one that will give the general practitioner a clear comprehension of the symptomatology, diagnosis, and treatment of the various affections with which he is most likely to come in contact. Diagnosis, being the most difficult and confusing part of cutaneous medicine, has been wisely accorded considerable attention. The elaborate remarks under General Diagnosis will be found of substantial aid in narrowing the diagnostic possibilities. Treatment has been detailed with unusual clearness and accurateness, the author, in addition to the remedies and methods used in his own practice, having referred frequently to those employed and advised by others.

But in stating that the book deals with the practical parts of dermatology, it is not to be understood that etiology and pathology have been neglected. These have been given entirely satisfactory consideration, and their treatment will be found a complete, but concise, reflex of our present knowledge. The clinical and pathologic aspects are further elucidated by a large number of very beautiful illustrations, mainly from the author's own collection, besides a number of colored lithographic plates of exceptional merit. Indeed, the work, though originally planned for the student and general physician, will be found of material assistance to the dermatologist, as presenting the most recent advancements in the subject.

While some of the prescriptions are written so perfectly as to serve for models in prescription writing, yet most of them are of the clipped variety and consequently a blemish on the pages of an otherwise scholarly book.



**SAUNDERS' MEDICAL HAND-ATLASSES. ATLAS AND EPITOME OF ABDOMINAL HERNIAS.** By Privatdocent Dr. Georg Sultan, of Göttingen. Edited with additions, by William B. Coley, M. D., Clinical Lecturer on Surgery, Columbia University (College of Physicians and Surgeons). With 119 illustrations, 36 of them in colors and 277 pages of text. Philadelphia and London: W. B. Saunders & Co., 1902. Cloth, \$3.00 net.

This new addition to Saunders' series of Medical Hand-Atlases covers one of the most important subjects in the entire domain of medical teaching, since these hernias are not only exceedingly common, but the frequent occurrence of strangulation demands extraordinarily quick and energetic surgical intervention. While the well-known work of Macready will always remain a classic, it has never made any claims to deal with the operative side of the subject, and this is a side that, during the last decade, has been steadily growing in importance, until now it is absolutely essential to have a book treating of the surgical aspect of the subject. This present atlas does this to an admirable degree, and without question, will prove of very great value to the general surgeon and practitioner. If the subject of trusses and their choice and fitting had been considered more fully it would add to the value of the book.

The illustrations are not only very numerous, but they excel, in the accuracy of the portrayal of the conditions represented, those of any other work upon abdominal hernias with which we are familiar. Indeed, like all the other numbers of this excellent series, the work is a worthy exponent of our present knowledge of the subject, and in its field is unrivalled.

**A TEXT-BOOK OF PRACTICAL THERAPEUTICS.** With especial reference to the application of remedial measures to disease and their employment upon a rational basis. By Hobart Armory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. With special chapters by Drs. G. E. DeSchweinitz, Edward Martin and Barton C. Hirst. New 9th edition. In one octavo volume of 851 pages, with 105 engravings and 4 colored plates. Cloth, \$4.00; leather, \$5.00; half morocco, \$5.50 net. Lea Brothers & Co., Philadelphia and New York.

One of the best recommendations of this book is the fact that nine editions have been called for in twelve years. The general arrangement of subjects in alphabetical order is one that appeals to the busy practitioner, and Dr. Hare seems to possess the rare, but happy faculty of presenting his subjects in a clear and practical way. This, the ninth edition, has been carefully revised and partly rewritten and every really useful new method or remedy has been embodied so that

the present volume is a reliable guide in therapeutics, and the information is readily accessible.

The book is arranged in two parts. Part one gives a concise account of materia medica food, diet and remedial measures other than drugs, and the second part gives a full list of diseases with the present accepted treatment. There is in addition a full general index, and an index of diseases and remedies. All in all this is one of the best of the one volume text-books on therapeutics.

The book is well printed and judiciously illustrated.

Of course the prescriptions in a text-book on therapeutics should be models for prescription-writing as well as guides for the use and combinations of drugs, and we are sorry that Professor Hare did not consider it worth while to make the prescriptions in his excellent book conform to this standard.

**A BRIEF OF NECROSCOPY AND ITS MEDICO-LEGAL RELATIONS.** By Gustav Schmitt, M. D. 3¼ x 6¼ inch, leather, 186 pages. \$1.00, net. Funk & Wagnalls Company, New York and London.

This pocket manual is a valuable vade mecum. Prepared to meet the needs of physicians and lawyers it gives in concise form the essential points to be observed in making an autopsy and the fundamental principles to be kept in mind in order to make a reliable and dignified expert witness. Such a book has long been needed and no doubt it will be welcomed by both professions. The methods to be employed in making the autopsy are those recommended and taught by Virchow and his pupils, and they are very clearly stated by the author. A short description of cerebral localizations adds much to the value of the book, and the index is full and helpful. The manual is well printed and well bound.

## Correspondence.

PORTLAND, July, 8, 1902.

*To the Editor of the Journal of Medicine and Science,*

*Dear Sir:*—In the June number of the JOURNAL you reprinted from "Suggestion," selections from the writings of H. M. Hart, D. D., regarding "Christian Science Obstetrics."

The reverend writer scoffs at the idea of Christian Science being of any benefit in cases of childbirth. Presuming that your readers would be interested in testimony bearing on this question, I submit with this partial copies of letters written voluntarily

by those who claim to have received help through Christian Science.

These letters were written to the editor of the *Christian Science Sentinel and Journal*, as an expression of thankfulness for help received after investigating Christian Science.

Letters could be quoted covering probably every known disease and from these I have selected a few obstetric cases with the object of quoting those cases where previous experiences under medical care had been more painful, or attended by more difficulties, or where the prediction that a living child could not be born, had been made.

These letters are submitted with the thought that the average medical practitioner is not so bound by prejudice, as to be unwilling to give credit to any method which may aid in alleviating human suffering. Such cases as those enclosed are not isolated instances, but many similar ones could be cited.

Medical and clerical opposition to Christian Science has seemed rather to accelerate than to retard its growth, and many doctors and clergymen are found among the supporters of this movement.

Yours truly,

FRANK F. HARRIS.

I wish to give a demonstration of Christian Science treatment in childbirth.

I awakened between twelve and one o'clock in the morning on November 12 last, and knew that the time was come. I telegraphed my teacher in Chicago, who had previously been asked for treatment, that the time was at hand and asked for help. Relief came very soon, all sense of nervousness disappearing, and the peace and rest which came only those know who experience it.

While the birth was not entirely free from pain, it was much more so than in any former experience. In less than half an hour I arose and walked unassisted into the next room to another bed. The next day I took full charge of the baby, going to the dining-room for my meals, and sat up in a chair the greater part of the day. The third day I was around the house and would have attended to my regular household duties, which I did assume from the third day. The ninth day I did my washing. I will add that I have four children born under the care of physicians with all the attention considered essential at such times, and although they were what are termed safe and natural births, they were always ac-

companied by great fear and pain, the last time chloroform being used to allay the intense fear of the final pain.

(Signed),

JESSIE E. SLOWEN.

Arlee, Mont.

On the 19th of August, 1900, our baby boy was born, weighing twelve pounds, and Truth carried me through at this time. It had been eleven years since our last child was born. In less than a week I was up about the house. Baby is now sixteen months old and a sturdy, healthy boy, walking everywhere. He has never had a drop of medicine. I had been told by my physician, at the birth of my last child, that I never could live through such an ordeal again, so I was happy to see what Christian Science could do for me.

(Signed),

MRS. LUTIE BARNES ADAMS.

Bay City, Mich.

On April 21, 1895, there was born to us a little girl. At that time we employed a physician and trained nurse. After twenty hours of labor and using of instruments and chloroform, the child was born, and my wife was told by the nurse she could never have another living child. Three weeks afterward she walked across her room for the first time. During February, 1897, I purchased a copy of "Science and Health." My wife received eight treatments from a loyal Christian Scientist; we also began the study of the text-book. The claims from which we suffered were completely overcome. I received only two treatments during this time. On April 19, 1900, a little after five o'clock in the afternoon, my wife (feeling perfectly well) was out walking in the doorway; a little after eight, there was born to us (in perfect condition) a son whose weight with a few light clothes on was eleven and one-fourth pounds; but how very different in every respect from the birth of our first little one. This time we had Christian Science. My wife was treated by one of Mrs. Eddy's loyal students, who was the only one present beside myself at this time. There was no medicine or instrument used, and almost no suffering. Everything passed in perfect order, and there was no trouble in any way. My wife as well as ourselves ate a hearty supper, and we all retired and slept all night. My wife was advised by the Scientist that she was perfectly well, and that the baby was perfectly well in every respect, but to use common sense, and not

do any thing foolish because she felt so well.

She rested comfortably in bed the first day, on the second sat up five hours. She has been up attending to her household duties every day since, and enjoys perfect health and strength, despite the fears of our neighbors who declared that my wife would have serious ailments as a result of her getting up too soon; but greater than all these has been, the peace and happiness gained by the study of science. Though we have had some good demonstrations ourselves, we know that it is only a small part of what may be accomplished by a better understanding of the Truth. (Signed),

S. W. TURNER.

San Francisco, Cal.

Three years ago I was looking to a plaster of paris jacket for strength and support. I was a weary, discouraged wanderer in the wilderness of material sense, looking for life and health in matter, thinking I was looking for God.

Being a young wife and mother, with no prospect but that of deformity and helplessness, I turned gladly to Christian Science when my husband's father, who was the only one in the family who had been led to this glorious light, came asking us at least to try. How thankful I am to the eternal Good, that He caused us to seek and find.

One of the most gratifying experiences was when our baby, Ruth Zoe, came, through the aid of Christian Science treatment. The first premonition was early on Sunday morning. My faithful practitioner and dearly loved friend was beside me pouring out words of love, so there was no room for aught else. There was a suggestion of pain, which was quickly destroyed. I arose and had my breakfast. A few moments before the little daughter was born I read aloud. Truly, at that hour divine Love filled all space to my consciousness, and Love ruled and governed. I dressed, came out, and sat in the rocker by the fire, and took baby, who found nourishment at once, and waited the return of my husband. One part of the demonstration I feel should be mentioned for the benefit of some mother who may have a like condition. When our son was born under *materia medica*, the physicians said that owing to unnatural conditions, I could not nurse my baby, and the breasts had to be lanced, and after much suffering the milk was dried up and baby given a bottle. Not so with this one. Every condition was destroyed, breast cord broken, action free and

baby has no bottle. She is now six months old.

(SIGNED), MRS. ENDA GRAY,  
Chicago, Ill.

[We print this article for what it is worth. No physician has any objections to the woman in labor being assisted in any way possible by means of so-called absent treatment or prayer or suggestion, so long as such methods do not interfere with his care of the patient and his responsibility for her safety. The danger in all this lies in the fact that in many cases death would result if nothing more than the Christian Science method of conducting obstetrics were available. Every physician knows that some women have comparatively little discomfort and pain during labor, and that some women who have had very dangerous complications in their first labor have passed through their second and third labors with comparative ease and safety. "Christian Science" teaching makes no distinction between normal labor and the most severe and dangerous complications. Most physicians will offer no objections to women availing themselves of Christian Science to carry them through labor if they so choose, and they will be willing to bring their skill to bear when "Christian Science" methods have been employed and not being sufficient, the woman is in extremis from eclampsia hemorrhage, placenta previa, retained placenta, narrow and distorted pelvis, or any other of the numerous complications of labor. But since the world has not yet advanced to that stage in which its people are willing to admit that nothing exists except what Mrs. Eddy is pleased to call the "Divine Mind," and since when sick, most people are unable to rise to that exaltation of faith in which they can trust entirely to Providence to bring them through without doing anything else to help themselves, for these reasons and many more which might be cited, the conscientious physician is opposed to the fallacies and the concomitant dangers which attend "Christian Science" teaching upon this subject.

There is a standing offer open to Mrs.

Eddy's disciples to assume the treatment of incurable diseases in certain hospitals, so that their methods may have a decisive test, but so far none of these disciples have had the courage of their convictions sufficiently developed to assume this responsibility. Of late it has been reported by a clergyman that Mrs. Eddy herself recently went to a dentist and had a tooth extracted by some painless process in which a drug was injected into the gums. This, as the reverend gentleman has well said, would seem to indicate that "Christian Science" treatment was not so good for Mrs. Eddy as for other people.—  
EDITOR.]

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## Selections.

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### \*Professional Ideals.

By REV. W. O. THOMPSON, President Ohio State University.

First of all, I note that the professional ideal of our day has gone beyond the thought of excellence. It has grasped the thought of the best thing attainable. This is the best evidence of professional progress. No man who has caught the professional spirit of our day can rest satisfied with an excellent result. He must reach the *ne plus ultra*. That you say is the unattainable. Yet it is precisely what in a most practical way our professional men are striving for. Therein lies our hope for the future. If in any point in our progress we are content to be satisfied—then as our evolutionist friends say, we begin to degenerate or revert to the original type. Self-satisfaction is the sure prophecy of decay. Onward is our marching order.

The medical profession has surprised the world with its progress in the last quarter of this century. In every department of its work men are found who believe that the future is full of hope for their work. They have a reason for such belief. From one end of the profession to the other there is present that spirit of praiseworthy discontent with present attainment that is the immediate result of the professional spirit. The professional ideal has not only dignified the profession, it has lifted it and blessed beyond computation the millions of our civilization.

\*Abstract of an address delivered at the annual commencement of the Ohio Medical University.

Even the dignified and slow moving professions of law and theology have in them this same spirit enkindled by the professional ideal. They are no longer content with the older methods or with present results. The noble profession of architecture that has so long adorned the world and cultivated our taste has evaded our homes until everybody is dissatisfied with what they have and long for something better.

Need I tell you now what I am sure the Faculty has emphasized again and again in every lecture and demonstration, that the present excellence of your profession is due to the discontent with earlier results. The promise of your profession today lies in the spirit of discontent within the profession with present results.

In view of these considerations I am inclined to express my belief that the most valuable element in a young man's professional equipment is, just this professional spirit that has been born of a professional ideal never reached but constantly and certainly approached. I mean by this that enthusiasm for his profession, which puts him in touch with the best that is in it; that will not permit him to remain a mere workman, but demands of him constant diligence and industry. It is for the cultivation of these ideals and this spirit that I appeal tonight.

They are your true measure and indicate what your future and the future of your profession are to be. If thoroughly cultivated they will, in individual cases at least, overcome every obstacle. Indeed all modern progress celebrates its victories by pointing to that which it has overcome.

A glance into this ideal will reveal its strength. Keep in mind that it is not excellence but the best attainable. That is our rallying cry. We shall never have this world good enough. We shall always want it better. This restless ambition to pursue our ideals, begotten of enthusiasm for the best things, not only implies ability, scholarship and devotion, but is itself a wonderful stimulus to develop native ability, to broaden scholarship and to cultivate the skill so essential to the best results. These three—ability, scholarship and skill—may be much cultivated. Indeed that is the business of education. These three constitute attainment, and every attainment is a prophecy. Such attainment can only be reached by men of ability, whose ability has been developed by the patient process of education and culture. For this reason attainment is honorable and every step forward makes it

certain that only men who will endure hardship may hope to rise to honorable position in their professions. Eminence in professional life is not therefore an accident. We can easily say that fortune has smiled upon certain men, but a careful examination into the causes of success among successful men will reveal the fact that the explanation of success lies in honest, hard toil, persistent pursuit of an ideal that ever eludes our grasp.

I desire to be understood as saying that the aims for professional men have been high and that they are becoming higher every year. I desire to counsel you that if you are to be anything more than the mere hangers on of your profession you must be possessed of these professional ideals. Any failure here will surely relegate you to the rear.

I am aware now that you can point me to individual men in every profession who have prospered and whose eminence and respectability in their professions have won for them the admiration of the multitudes. They may have amassed fortunes and enjoyed the recognition of the world, while at the same time they are known among their associates to be men of low ideals and lower practices. Indeed I am not sure that you can point me to very many such men.

Let me therefore say just two things: First, it is easily demonstrated that these men have not been the progressive men in their profession. They have not been the men who have given dignity and standing to the profession. They have not been the men who have pushed the profession on to better and better results. They have simply been the camp followers of the great army of noble men who have toiled in the interests of sound learning, of science and of culture.

The second remark is that there is always present in society an element not able to distinguish between the professional man and the professional swindler. This number is few, and may the tribe decrease. But I trust that I am not speaking to men of low ideals who would lower their profession to the level of a trade. I trust you were able to gain your living before you began the pursuit of a profession, and that therefore you are looking toward a profession as affording an ideal where life may be ennobled and where labor may be expected that will tax to the utmost the resources of both heart and brain.

Let me say therefore, for your encouragement, that the public is appreciating more and more the men who pursue such ideals.

You will not be called to serve an indifferent or an indiscriminating public. People are no longer satisfied with the man who can merely preach, or the physician who can only practice, or the teacher who can only teach. People have had some experience with these types and are becoming weary. Sentiment has changed and improved. We are now demanding masters in business. People are demanding the very best that clear thought, approved science and well directed skill can do. The counsel of our times is therefore, be patient, tarry in your work of preparation until you are well equipped. Bring to the world something worth the bringing. The hurry of our age has left the impression in some quarters that there is great need of getting into the active world of business as soon as possible. No greater mistake has overtaken our modern life. The world is not clamoring for more bunglers and blunderers. We have learned too often by a sad experience the folly of entrusting great interests to incompetent men. The world greatly needs you, provided you can bring her a first class service, but on no other condition. The fallacy of putting the heavy responsibilities of professional life upon immature men is evident to close observers. There is a certain strength and confidence that comes only with years. This strength and confidence is often a condition of success quite as truly as the result of experience. A man well prepared for his profession at thirty has more life ahead of him and infinitely better service than the same man imperfectly prepared at twenty-five.

The second element in the professional ideals of our times to which I call your attention is, that professional service is no longer regarded as a means of mere getting, but is looked upon as a generous giving. Professional men have come to realize the truth that it is more blessed to give than to receive. The public too has come to see that the highest services rendered have been from the professional men. Professional men in turn have come to look upon their callings as means by which the altruistic spirit may find its highest expression.

It is not necessary, I trust, to refer to the fact that there are other and material rewards in our profession and that there must be. It is no longer necessary to prove that services must be paid for; that professional service is not to be regarded as a gratuity; that professional men have rights as sacred as any other. All these things are assumed. I desire to say that professional men are

something more than and better than money makers. I do not believe that the professional spirit of our day has led men simply to work for themselves. Nor do I believe that men are moved simply by the hope of things material. The charge of a gross materialism cannot be justly laid at the door of our professions. Men there are who follow simply for the loaves and fishes. These are not the profession. They are not to be classed among her noble spirits. The struggle for existence is not the only struggle in the world. It is quite as often a struggle for the life of others. The true spirit of professional life is not self-aggrandizement but ministration. Not so much individualism as altruism. This indeed is the law of nature. Evolutionists tell us that the struggle for life is only half, and hardly half, the strife—that the struggle for others is the more important part of the story. It is easy to see the same two sides in all professional life, and that the nobler side is also the more attractive side to men who take broad views of their work.

This altruistic ideal is what has ennobled the professional life. Indeed it has ennobled all life and all toil. Professional men have come to see that they are not toiling for self alone, but for humanity. Self is reduced to the minimum. Every consideration bids us look to other than self. This, I believe to be the spirit of our professional life today. He who lacks it, lacks, in my judgment, all essential preparation for a great career.

The truth is, to speak of no others, that the medical profession of our day can not be said to be spending their time and energy merely for money; nor for the advancement of science.

They are, no doubt, men whose enthusiasm is purely material, or whose energy is in the interest of science, but over both of these and all other motives our physicians are working for the amelioration of the condition of their fellowmen.

We might easily show that enthusiasm for science has been the condition of the altruistic enthusiasm so readily found. \* \* \*

But in all professions this same spirit of public service has gained the largest place in the professional man's horizon. All these years men have been clamoring for practical results. The professional man has had the eye to see what practical means. Here the professional ideal has come in to lift men and stimulate toward the best results. Public opinion has not been the cause of modern advancement. The secret is to be found in the ideal that has stimulated toward attainment. We are satisfied when public opin-

ion is able to appreciate the man and his work.

It is worth while to observe, therefore, young men, that your highest and most satisfactory rewards will come to you as the fruit of this altruistic spirit. This is what makes it possible for the cultivated and cultured spirits of every profession to associate upon friendly and helpful terms. It opens wide the door for the exchange of courtesies and the recognition of merit wherever it may be found. It recognizes all men living and laboring upon the same high plane of public service for others. Here in this association and in the consciousness that your life is spent for the helpfulness of others you will find your most enduring rewards. You will probably have enough of the ungrateful and the unworthy to let you see the unpleasant side of service, but they will emphasize to you the beauty of unselfishness and the satisfaction that comes from honest service given from pure motives.

All this stands squarely against the purely utilitarian view or the view that brings our profession to the measure of money. The temptation is ever present with young men to overestimate the financial side of every profession. No other one element is so prolific a cause of failure. The truth is, that professional men are not, in this regard, worse than others. They have in all probability here partaken of the popular sentiment that has introduced so many artificial and false measurements. The current notions have led to artificiality in life and frequently to dishonesty. Oftentimes things are not what they seem. In professional life it will not satisfy to be as other men are. We must in this regard be better than the public sentiment and our ideals must be higher than those of the multitudes or we shall fall to their level. In that case our cause fails. On one occasion the late Prof. Agassiz was asked to take time to give to the country, in a popular form, some lectures. As an argument from sincere men it was urged that he could command large pay for his services. His reply, characteristic of the man, was, that he had no time to make money. He did, however, have time to make for himself a place in the scientific world. He is immortal as a naturalist. His place can never be forgotten or overlooked. All who came after him must walk in his footsteps and think his thoughts after him. He will continue a perpetual teacher and a perpetual inspiration to all students of science. He was possessed of the professional spirit which is always unselfish. He has left in the world

what the world needs. He gave himself to the world, and the splendid gift is our inheritance. The annals of professional men are full of such devotion to humanity. They form the hopeful and encouraging side of life. As you stand tonight looking forward to a professional career, I should like to have you think of the undying devotion of the best men of every profession as a great inspiration. I should like to have you regard your profession as a great opportunity in which you may bring to perfect development a type of manliness that shall be the crown of our civilization; an opportunity to pursue legitimate ideals to the help of humanity and to the help of the profession as well.

This leads me to a third element in professional ideals, viz: that of character.

To the professional classes in society are committed the most sacred interests society knows. Dealing with these interests involves the most careful regard for the truth and consideration for the individual. It is not simply the greatness of the interest, nor the importance of it, nor the delicacy of it that makes these trusts reposed in professional men so vital to the welfare of society. Every individual person recognizes that the character of the professional man is a bulwark to every good cause in civilization and at the same time a guarantee against decay. They are the men who carry our ideals, who maintain our life and who save us from disaster. Usually they are the most conservative men in a city or in the state. Their character is therefore the index of the great current of life or civilization that makes the professions a necessity. The importance for professional men to the essential well-being and the progress of society has not always been appreciated by the multitudes, but I am not dealing this evening with appreciation, I am appealing to a class of young professional men who presumably know the place they are to take in society and desire to urge upon them that whether appreciated or not, their work and mission is none the less important and vital to society. Let me urge, therefore, that professional men of every class join hands in the great fraternity or brotherhood of men that shall stand together for the best things, not simply within a profession but over the entire area which professional life is intended to reach. Men who serve the public usually carry with them the consciousness that public service is by that fact a public trust. The benefits that flow from successful service rendered by a lawyer may not be confined to his client. Through the maintenance of truth and the establish-

ment of justice he protects every honest man against the attacks of dishonesty from whatever source they may come. The healing art finds its full reward not in a subject where mastery over disease has been displayed, but through the larger service brought to society and to the world of science.

It is a fallacy, therefore, to suppose that this great service to which I allude may be rendered by men and women whose character is not in accord with the high service to which they aspire. I am aware that the ideals in society have not been the best upon this topic. I am fully aware that many people seem to think it possible to divorce skill and learning from character, but a broader view of the professional classes will, in my judgment, bring to any fair-minded person the conclusion that ethical character is itself a necessity for highest attainment among men in professional life. It is pleasant to contemplate that in the past twenty years there has been a great upward movement in this particular. \* \* \* Notwithstanding all the publicity that is given through the daily press to the unusual and exceptional, it is still capable of abundant truth that public men, and professional men, business men and men of large wealth are all men of perceptibly higher and better character and that their ideals are improving. It is pleasant also to notice that on the part of the public there is a demand for just this thing. The dissolute attorney finds it increasingly difficult to secure a practice. The medical fraternity itself is a body of sober men, a body of men who stand for physical, mental and moral healthfulness. In many cases they have been the recognized leaders for better things in society. Here, as in any other profession, the man who in his private life does not accord with the ideals of the community will at least, in all of his public and professional dealings, maintain good form and refrain from reflecting upon men who demand the best things. Under these conditions young men are recognizing more and more that their own character is an essential part of success.—*Columbus Medical Journal*.

VIRULENCE OF THE DIPLOCOCCUS IN HUMAN SALIVA, ACCORDING TO AGE AND SEASON.—Efisio Murgia concludes from experimental researches that the diplococcus is most virulent in persons under ten or over forty years of age. Low atmospheric pressure and low temperature, abundant rain and dampness appear to favor the pathogenic action of this organism.—*La Riforma Medica*, August 14, 1901.



**Ergoapiol (Smith) in Diseases of the Female.**

By CHARLES H. SHEPARD, M. D., Physician to Lincoln Hospital, Durham, N. C.

A deep and general interest is attached to all knowledge pertaining to the treatment of common diseases of the uterus, to which women are subject, and a vast literature is the outcome of this profound and focussed interest. We live today in an age of transition—a period of change. A great many of the former theories in medicine are fast passing away. New medicines are made, achieve a short-lived success, and then pass on to obscurity. This is true most especially in medicines for gynecological diseases. Of the newer remedies it is hard indeed to get one that may be depended upon for long. They soon lose their reputation and potency and are relegated to the past.

We know that all diseases of the womb have not the same etiology nor the same pathology, therefore they should not all have the same treatment. Far too often the general practitioner groups all these diseases together as one, and gives the routine treatment. It is not enough to give anodyne medicines for dysmenorrhea no more than it is sufficient to treat alike all forms of dysmenorrhea.

The operation of curettement has a most important place in these conditions, but like other remedial agencies it has its limitation. When we curette the uterus we rid it of a pathologically obnoxious lining membrane, and afford a normal membrane the opportunity to be formed.

The healthy woman with normal genitalia menstruates regularly and painlessly once a month from puberty to the "turn" of life, except that this regularity is interrupted by pregnancy and afterwards by lactation. Any departure from this rule constitutes an abnormality. Amenorrhea is less frequently met with than dysmenorrhea and irregular menstruation. The present age of transition has brought forth what is popularly known as the "new woman," and she has brought with her new ideas and practices which in very many cases retard growth and the natural process necessary for perfect health. For leaving the old landmarks, she has to suffer.

The most generally useful medicine in the conditions of amenorrhea, dysmenorrhea, irregular, scanty and fetid menstruation, in my judgment, is a preparation of the Martin H. Smith Company, of New York, known as Ergoapiol (Smith). In the female ward of the Lincoln Hospital, Durham, N. C., I have

used this medicine very extensively, and it has not only never failed to benefit and cure, but I know no remedy with which I could replace it were I deprived of it. Its efficacy may be tested by any physician who properly tries it. I mention a few cases with short description of each, in which it has given the most signal benefit in my hands.

Ergoapiol (Smith) is put up as a small capsule, and is made up of a special form of apiol which is of the very highest quality. Combined with this are some other most valuable hemmagogues and they all go to make a fine preparation. It seems to be a scientific pharmaceutical preparation, non-toxic, tonic, as well as emmenagogue. What I have to say of this preparation is based entirely upon clinical experience, and I feel safe in saying that it will bear a clinical test whenever properly administered.

**REPORT OF CASES.**

No. 1. Mrs. F., was admitted to hospital, September 15, 1901; married; no children, though she had been married four years. Had not menstruated for seven years. Womb had been curetted several times; suffered from leucorrhea; pains in right and left iliac regions continuous. Examination showed a very small os, but generative organs were otherwise found to be normal. Another curettement failed to bring on the menses. I then prescribed Ergoapiol (Smith) to be taken one globule three times a day, and afterwards increase to one globule four times a day. After seven days of this treatment she complained of a general feeling of stiffness in her limbs, gaping and a feeling of malaise. The following morning she found to her delightful surprise that she was menstruating for the first time in seven years. At that time the flow was somewhat scanty, but the treatment was continued through three periods. Each succeeding period was more nearly normal than the one that preceded it. Now her functions are regular and I know no reason why she may not become pregnant.

No. 2. Mrs. S., complained of a continuous, dull, dragging pain, situated in the region of the iliac fossa of the right side. Menstruation irregular, scanty, fetid. Married six years; had never been pregnant. Excessive leucorrhea, though otherwise she was perfectly normal. Her weight was 140 pounds. Her condition, and the suffering, both physical and mental, which it occasioned her, was rapidly undermining her health. She was becoming emaciated, ap-

petite of no consequence, general weakness. She considered her condition "hopeless." Cardiac weakness, of which she was a victim, contra-indicated curettement—which usually cures "whites" and allows the formation of a healthy lining membrane. Ergoapiol (Smith) was prescribed for her, one capsule three times a day. In conjunction with this I gave tonic medicines. After six weeks' use of this remedy, the woman said she was "feeling so good" that she did not need any further treatment. She had increased in weight, and her appetite had become all she could wish. The menstrual flow was increased, and now, five periods having elapsed from the time treatment was instituted, her monthly flow has failed to appear. She does not expect its return for sometime—supposing herself pregnant.

No. 3. Miss S., suffered severe pain each month beginning a day before the flow came on. The flow was a thick, clotted mass, consisting of membrane and the menstrual blood matter together. She had suffered from puberty, and the suffering became more intense as the years passed on. She was 19 years of age, stout, of healthy parentage. Admitted to Lincoln Hospital January 15, 1902. She declined an operation. I afterwards prescribed Ergoapiol (Smith) and have continued it for one month. Her next menstruation was free and easy; painless and regular. I doubt not that keeping up this treatment up to another period she will be entirely rid of the hitherto troublesome condition.

No. 4. Miss W., tubercular history. Menstruation very irregular, sometimes three, sometimes five weeks between periods; very painful; scanty. I prescribed Ergoapiol (Smith) one capsule four times a day beginning one week before the menstrual period and continued a week after the period. As a result of this treatment the patient feels a great deal better in her general health; her monthly flow has been rendered painless and increased in quantity. Ergoapiol has a tonic action upon the muscular fibers of the womb. Its effect is not transitory but lasting. This superior preparation is decidedly tonic.

No. 5. Mrs. D., a victim of endometritis. Pain continues between periods, and is aggravated at periods. Leucorrhea was very pronounced; pains in the back; "hot flushes; vertigo, headache. Patient would not allow an operation; highly sensitive. Several preparations were tried, but none gave relief until Ergoapiol (Smith) was used. It has entirely relieved the patient, and she is now

loudly singing its praises. In this case treatment was kept up for ten weeks.

Ergoapiol has never failed in my hands. It is not possible that it can cure obstructive dysmenorrhea, but with that exception it is indicated in all the other diseases of the womb where a tonic and sedative action is the requirement.

No. 6. Mrs. D., widow; aged 33; had three children; youngest 10 years of age. She had suffered all her menstrual life severe pains in the pelvis at each period; had to keep in bed a week or more each month; paroxysms of pain were followed by a flow of the "whites;" no anemia; womb found to be flabby and relaxed; pains extended down thighs posteriorly. Had been treated for many years by various physicians of note, but had received only temporary benefit.

Ergoapiol (Smith) was given her, one capsule three times a day, and increased at the time of the flow to four a day. After three months of this treatment her menstrual function became regular, and being entirely well now, she feels that life, after all, is worth living.

I could prolong this list indefinitely with records of cases that have been entirely relieved of these conditions, and I shall be pleased to furnish any information desired as to Ergoapiol (Smith) and its use.

Durham, N. C.

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#### \*Dietetic Treatment of Pulmonary Tuberculosis.

By D. OLIN LEECH, M. D., of Washington, D. C.

It was but a little time ago—in the boyhood days of many of us—that this admitted scourge of the human race, tuberculosis, widely known as the White Plague, was looked upon as incurable. Many prominent physicians shared this belief. It is pleasant to say that that day has forever gone. There is no physician who has the true spirit of his profession but is full of the hope of final triumph. Already the ratio of cure has greatly increased and is enlarging yearly. In the matter of prevention of the disease the outlook is still more hopeful. Hospitals and sanitoriums erected for the treatment of the tuberculous, notably that of Loomis at Liberty, N. Y., and that of Trudeau at Saranac Lake, New York., representing as they do the high-water marks of medical

\*Read before the American Therapeutic Society, Third Annual Meeting, held in New York, May 13, 14, 15, 1902.

knowledge and skill in their efforts to combat the scourge, are not simply monuments of progress already attained, but are a type and prophecy of results soon to come, when the devoted spirit of our noble calling will send hope and joy to multitudes whose outlook for this life has had little of brightness.

There is no magic and but little medicine in the treatment of tuberculosis. Universal experience makes it clear that the three great specifics, both for prevention and cure, are pure out-of-door air, freely taken by the subject at all hours; rest, partial or complete, for those already afflicted; and abundant nourishing food properly prepared and administered. Wisely chosen drugs have their place as an aid, under certain circumstances, but the great reliance for success I have just stated.

It is my object in this paper to consider the phase of relief represented by nutrition. Beyond question, a vast deal of our success depends on this. Sanitary surroundings are, of course, important, exercise and rest have a large place; but these will avail little unless the body is properly nourished, so that rich blood may build up the tissues, and give strength to resist the disease and maintain vigorous health.

Proper diagnosis having been made and the patient being in suitable surroundings, climatic and hygienic, there arises this vital matter of proper feeding. Cases in which there is no appetite, but rather a repugnance for food with persistent gastric irritation, offer a very unfavorable prognosis, and tax the physician sorely. A good appetite with fair digestion is always looked upon as most favorable. Many tuberculous patients have to be fed in an entirely different way from others, and each case is a law unto itself, although, as a general routine, we have to start them all on a prescribed diet, varying the same from time to time as the case may require.

It is not wise to pin one's faith to drugs with the object of creating an appetite. While it is doubtless true that a few of the bitter tonics, such as tincture of *nux vomica*, cinchona, gentian, hydrochloric acid, or the various preparations of the hypophosphites may do good in a few cases, I have rarely seen them maintain any permanent beneficial effect.

Change of air and surroundings, salt air, a sea voyage, during which enforced and absolute rest in a reclining chair on deck may be secured, and a dry, cold atmosphere at a moderate altitude, are without doubt the best conditions. It is truly remarkable how

some of these patients who loathe food of every kind begin to crave nourishment under certain conditions of climatic change and rest. Given a case with loss of appetite and fever, which latter is nearly always present when they first come under observation, the patients should invariably first be placed at rest and kept in the open air, well protected; then he should be regularly fed at stated intervals. From a fever diet we should gradually increase to one rich, varied, and easily digested. Proper cooking and the suitable preparation of food is a most important desideratum for a tuberculous patient.

Dyspeptic symptoms should always receive careful attention, since in many cases, a successful issue depends on the tolerance of the stomach for food, and the proper assimilation thereof.

Nausea in the early stage in some cases is allayed by the use of carbonated waters, creosote and lime-water; calomel and soda in small doses. In a few cases I have had to resort to cocain; a tablet containing-bismuth subnitrate gr. 2, cerium oxalate gr. 2, and cocain muriate gr. 1-12, is an excellent combination.

The diet should consist of good, red, juicy beef, broiled, toasted or scraped, in a much more generous proportion than for a healthy person; young mutton; breakfast bacon—a streak of lean and a streak of fat alternating—broiled; fish of all kinds, boiled or broiled. In fact, sea food of any kind in season, with many patients is most acceptable. Fresh eggs, prepared in any way except by frying; plenty of fresh milk, cool, warm or peptonized; buttermilk, koumiss, digestible cocoa or chocolate, coffee or tea in moderation, and an abundance of pure, cool water should be used. Desserts are allowable in moderation: farina, sago, tapioca, rice with fresh cream; custards, baked or stewed apples with fresh cream, and any kind of cooked or fresh, well-ripened fruit.

The amount of starchy foods should be limited; not because they are of themselves harmful, but because they fill up and require more power to digest. Thus they lessen the desire for more nourishing food. Plenty of fresh green vegetables may be allowed; potatoes, roasted or mashed, with butter and cream; spinach; onions, in any way except fried; asparagus; sliced raw tomatoes; cresses, lettuce and celery; French salad dressing (pepper and salt, vinegar and olive oil) is a great addition to these salads, sharpening the appetite materially. Mayonnaise dressing is very appetizing and nutritious. Just here I may say that pure Lucca

or olive oil is a most valuable addition to our diet list. Many persons who at first cannot eat it soon learn to like it, and can take and digest an ounce or more, to their advantage. Tuberculous persons should never eat fried food of any kind; nor salt fish, hash, gravies, veal or pork. Sweets, pastry or sweet wines, should not be allowed.

The arrangement for the time of meals is most important. Most authorities hold to the three principal meals with light nourishment on awakening and at 11 A. M., 4 P. M. and at bed-time. Minor, of Asheville, follows this method. Weber and Detweiler recommend the following dietary arrangement, viz.: At 7 A. M., on waking, a cup of milk with a teaspoonful of cognac, or a cup of tea or cocoa with a small piece of bread and butter; 9 A. M., breakfast: milk with tea, coffee or digestible cocoa, with bread and butter, ham, fish or smoked meat; 11 A. M., a large glass of milk or koumiss, or a cup of beef-tea or other meat soup, a piece of bread and butter with a glass of wine; 1.30 P. M., dinner: well-cooked meat, game, fowl, or fish with fresh vegetables, some light pudding or cooked fruit and a glass of wine; 4 P. M. a glass of milk or koumiss; a cup of tea or coffee well diluted with milk; bread and butter or light biscuit; 7 P. M., a substantial meal similar to dinner; 9.30 P. M., bed-time, a glass of milk, bread and milk or some light farinaceous pudding with milk.

I have now under my care a young woman who is far advanced with pulmonary tuberculosis, with constant fever; a hopeless case. I have her on the following diet list: 1 A. M. and 4 A. M., if awake, a small glass of milk; 7 A. M., a glass of milk and raw egg; 10 A. M., 1 ounce of liquid peptonoids with guaiacol; 1 P. M., milk and egg with a piece of dry bread; 4 P. M., peptonoids; 7 P. M., milk and egg; 9.30 P. M., cup of hot beef-tea or mutton-broth; 11 P. M., peptonoids. I treat this patient exactly as I would a patient with typhoid or other continued fever, excepting, of course, as to the bread. I have no hope of a cure, but it is wonderful to note how, upon this diet, she holds the strength she has.

Gavage, as used in Débove's method of "over-alimentation" or "forced feeding," has to be used in some instances, although when this has to be resorted to, the case is almost necessarily hopeless. As Minor tersely puts it: "When resorted to, it is generally too late to expect anything from it but pain to the patient from the tube, and a slight prolongation of a life he is anxious to give up."

Concluding, let me say that as lovers of our race we cannot overestimate the importance of two things in connection with this disease: (1) The spreading through the press and in every other legitimate way possible, a sense of the necessity for the prevention of this flattering but too often fatal malady, through scientific sanitation, with proper physical culture and out-of-door life; (2) that of impressing society with the immense value of the earliest possible medical treatment when threatening symptoms have already appeared. Without attention to these things tuberculosis can never be banished from among men. Thousands are slowly dying around us who might now be enjoying health had they estimated these matters properly.

We may, I think, fairly congratulate our profession on what has already, and largely in recent years, been attained in successful combat against this plague. Let each continue to do his best, buoyed up by the reasonable hope that through our labors humanity may soon be comparatively free from this disease.—*American Medicine.*

#### Appendix in Relation to Psoas Muscle.

Robinson (*Annals of Surgery*, April, 1901) states his conclusions, after studying the appendix in relation to psoas muscle, as follows:

1. Trauma of the psoas muscle produces appendicitis.

2. Muscular trauma produces appendicitis if the damage occurs in the appendix when it contains virulent microbes, and especially if the spiral or kinked condition and periappendicular adhesions produce increased tension of secretion—in short, if drainage be compromised.

3. Over seventy per cent. of peritoneal exudates occur in the right iliac fossa adjacent to the psoas, and any peritoneal exudate associated with the ileocæcal appendicular apparatus compromises its anatomy and physiology.

4. In males fifty per cent. and in females forty per cent. of periappendicular adhesions exist. Periappendicular peritoneal adhesions compromise the fecal circulation of the appendix and obstruct drainage; they compromise blood and lymph circulation; they compromise peristalsis; they traumatize nerve periphery; they compromise the nourishment of the appendix; they cripple and devitalize the appendix, making it unable to resist trauma and infection.

5. When muscular trauma acts on an

appendix containing virulent germs compromised by periappendicular adhesion, in drainage, in fecal, blood, and lymph circulation, limited in nourishment, and peristalsis with local devitalized atrophic cells end, appendicitis, with ulceration and obliteration, perforation is liable to occur.

6. The dangerous appendix is the one in a spiral or kinked shape within range of traumatic action of the psoas or other powerful muscles. The size and length of the appendix have no special relation to the frequency of appendicitis.

7. The ratio of appendicitis in man and woman is about three to one.

8. It is chiefly owing to the fact that man's appendix is more exposed to psoas muscular trauma than that of woman. The appendix is practically the only segment of the tractus intestinalis in which muscular trauma produces ulceration or perforation. This is due to lack of appendicular cell vitality, lack of blood, lymph and nerve supply, to atrophic cells, and to poor nourishment.

9. Other segments of the tractus intestinalis than the appendix lying within range of muscular trauma show similar adjacent peritoneal adhesions, but no ulceration or perforation because of more perfect drainage and higher cell vitality.

10. In males (300) the cæcum, lying within range of the action of psoas, presents sixty per cent. of peritoneal adhesions.

11. In females (118) the cæcum, lying within muscular trauma of the psoas, presents sixty per cent. of peritoneal adhesions.

12. Peritoneal adhesions in the mesosigmoid from trauma of the left psoas are eighty per cent. When the distal end of the ileum lies within the traumatic range of action of the right psoas it presents seventy-five per cent. peri-iliac adhesions.

13. The cæcum, distal end of the ileum or sigmoid, though surrounded by distinctly macroscopical peritoneal adhesions, do not present mucal ulceration or peritoneal perforation on account of good drainage and cell vitality.

14. The vitality of other segments of the tractus intestinalis than the appendix resists the conflict, trauma and infection of life's forces, but the appendix does not.

15. The position of the appendix depends on the length of the mesocolico-mesenterium (fixation apparatus); the state of distention of the adjacent viscera, uterus, gastrum, colon, enteron, liver, and kidney; the length of the appendix; the degree of visceral ptosis and laxity of the abdominal walls; the sex, shape of the abdominal cavity; and the ex-

isting peritoneal adhesions in the ileocæcal appendicular apparatus.

16. Athletes, baseball and football players, bicycle riders, swimmers, blacksmiths, and trades of vigorous physical activity—in short, heavy workers who vigorously use the psoas—have appendicitis.

17. Cases of appendicitis frequently arise after epidemics which induce catarrh of the tractus intestinalis, as typhoid fever, la grippe; especially after fruit seasons summer diarrhea and catarrh or endoappendicitis arise, because the damaged tunics of the appendix (mucosa and muscularis) do not withstand the muscular trauma of the psoas with accompanying infectious invasions and the obstructed drainage due to compromising periappendicular adhesions.

18. Second or repeated attacks of appendicitis are less dangerous, because the first attack blocks and obliterates the adjacent lymphatics, so that the radiating channels are limited in capacity to carry infection.

19. Almost all post-mortem and clinical evidence points to the appendix as the organ which is most dangerous and treacherous of all abdominal viscera.

20. The appendix being an atrophied organ, its cells are devitalized, with a limited blood, lymph, and nerve supply and deficient nourishment; the weakest segment of the tractus intestinalis is therefore an easy prey to trauma and infection.

21. The appendix is relatively large at birth, and it decreases in size through every subsequent decade of life; hence progressive atrophy with devitalized cells and damage from periappendicular adhesions make the appendix a dangerous organ in adult life.

22. One hundred and eighteen females showed partial non-descent of the cæcum (and subsequently the appendix) in four per cent.

23. Three hundred males showed partial non-descent of the cæcum (and consequently the appendix) in seven per cent.

24. To find the appendix in operating, follow the distally directed colonic bands (tænia coli) to the point where they converge at the base of the appendix.

25. The data of this paper, confirmed by twelve years of autopsic abdominal inspection and a decade of abdominal surgery, teach that the frequent periappendicular adhesions are not appendicitis but peritonitis; however, the periappendicular adhesions are important steps in the journey of trauma and infection with obstructed drainage toward appendicitis.

26. The foreign body in the appendix is

dangerous, because in a non-resisting organ like the appendix it soon produces ulceration, and ultimately perforation, because drainage is deficient.

27. The dangerous appendix is that in spiral or kinked condition when drainage is easily compromised.

28. The appendix, like the mesonephritic rests, is of no physiological or anatomical importance to the adult, but from the atrophic devitalized resistance of its cells it easily succumbs to trauma and infection, jeopardizing the subject to the most profound and treacherous of all abdominal diseases.

29. All fading organs are especially liable to the disasters of trauma, infection, and malignancy.

30. The appendix develops and atrophies irregularly. Its size and function have regard to age.

31. The appendix varies more in position than any other abdominal viscus. It is probable that its position and growth, whether directed proximally, distally, or laterally, have very little to do with the evacuation of its contents if the lumen be not compromised by spirality or adhesions, as any healthy appendix is capable of emptying itself.

32. Its size has the wide limit in variation of all atrophic organs, *e. g.*, the mesonephros.

33. The appendix appears to increase in size from birth to about the twentieth year, when it decreases for every subsequent decade of life.

34. The obliteration of the appendicular lumen by strictures or connective tissue increases from birth to death from constant atrophy and retrograde processes. The frequent incipient attacks of adult life are due to fading vascularity.

35. Of the three organs, distal ileum, appendix, and cæcum, which lie within range of traumatic action of the psoas, the least resistant (the appendix) is surrounded by the vast majority of peritoneal adhesions.

36. Periappendicular adhesions check appendicular peristalsis and traumatize nerve periphery, resulting in appendicular colic.

37. Pain in the right side in walking, or pain passing distalward in the distal extremity, may indicate peritoneal adhesions traumatizing the anterior crural nerve or producing a neuritis.

38. Pain may also arise in the right ovarian plexus or right spermatic cord from extension of inflammatory processes, peritonitis, in either structure.

39. The appendix is the weakest segment

of the tractus intestinalis because it lacks in vital cell resistance, its blood supply is limited, it is defective in drainage, it is compromised by more adhesions than any other segment, and it is subject to vigorous muscular trauma.

40. The appendix and mesoappendix are frequently infected from the oviducal pavilions, and *vice versa*, to a large extent. Doubtless the formation of the (atrophic) appendix may have its origin in erect animals (erect apes, wombat, and man) through absence of the mesenterium commune (curtailing blood-supply), the more complete axil rotation of the tractus intestinalis about the superior mesenteric vessels (again curtailing blood-supply), and through the slow descent the cæcum forcing its journey through the subserous connective tissue (constricting blood-vessels) at the proximal end of the colon. Hence the formation of the appendix is due to the constriction of blood supply through extensive axil rotation of the tractus intestinalis about the superior mesenteron vessels and nerve.

41. A factor to consider in regard to the appendix is visceral ptosis, which is due to separation and elongation of the fascial and muscular fibers of the abdominal wall, especially at the linea alba and semilunares, as well as diastasis of the recti abdominales. The mesenteries, not being made for mechanical support, allow the viscera to follow the yielding abdominal wall; this condition increases the number of potential appendices and multiplies the chances for appendicular disease by compromising circulation, assimilation, and traumatizing nerve periphery.—*The Therapeutic Gazette.*

#### The Treatment of Tetanus.

Tetanus may be defined as an acute infectious disease, which owes its origin to a special bacillus, and is characterized by painful spasms of the voluntary muscles. In tropical countries, and in the negro race it is said tetanus often arises idiopathically. In temperate climates, however, the germ which gives rise to tetanus gains entrance through some wound. These may be contused or lacerated wounds, or burns, may afford the gate of entrance to the *tetanus bacillus*. In the treatment of all wounds it should be the aim of the surgeon to see that it is thoroughly cleaned. If this is done in all instances we shall find that we will have fewer cases of tetanus. The growth of antiseptic surgery, in the estimation of the pro-



profession, has saved many lives from tetanus to say nothing of what it has done in other ways.

Lately the profession has heard much of serum therapy, and not a little has been written concerning the virtues of the anti-tetanus serum. I have followed the experiments made with this serum, and have watched its action when it was put to actual test at the bedside. This has been to convince me of the worthlessness of serum as a curative agent in tetanus.

It is common to find authors recommending bromide of potass, and chloral as the best remedies for tetanus. Most writers too advise the giving of morphine hypodermically to relieve the pain and tendency to spasm.

Bromide potass, and chloral will often relax the patient and they may in some cases do good we believe. We would not exclude morphine in the treatment of this disease, although we never advise this agent when it can be gotten on without.

Our usual course in treating tetanus is to give the patient Daniel's Conc. Tinct. *Passiflora Incarnata* in doses of two teaspoonfuls every one or two hours until the patient gets relief and is able to sleep. Daniel's Conc. Tinct. *Passiflora Incarnata* is one of the best antispasmodics we have, and it is also a good anodyne and that makes it especially valuable in tetanus. When the patient cannot swallow I give the remedy by the rectum. When it is given by the rectum it should be given in increased doses—say a tablespoonful. When the *Passiflora* itself does not bring about relief of pain we may give the patient hypodermic injections of morphine often enough to secure rest. These two remedies can be trusted implicitly to bring us good results in most cases. In the mild types of tetanus, and in those cases where the disease is not characterized by severity, we will find that liberal doses of Daniel's Conc. Tinct. *Passiflora Incarnata* will control the case and lead the patient to recovery.

I never, however, let these patients suffer when I can help it, and therefore adhere to the rule of giving these patients morphine when they are suffering with pain or restlessness that does not yield readily to *Passiflora*.

Before leaving this subject let me call attention to the fact that chloral is indeed a most dangerous drug. It is well known that it often produces death very suddenly. In fact there are very few prudent practitioners now who can be induced to give chloral. In tetanus where the heart is weak and irritable

it strikes us that chloral should be one of the last remedies to be given.

The bromides may be beneficial but they are not reliable, and at no time can they be compared favorably with Daniel's Conc. Tinct. *Passiflora Incarnata*, because that is anodyne, antispasmodic, nerve stimulant, and it does not produce injurious after effects as do the bromides.

Daniel's Conc. Tinct. *Passiflora Incarnata* is entirely non-toxic and can be continued a long time without producing any bad effects.

DAVID MILLER, M. D.,  
Utah, New Mexico.

#### Summer Diarrheas of Children and Their Treatment.

By M. A. AUERBACH, Ph. G., M. D., New York City  
Medical Inspector, Department of Health.

The importance of these demand a separate consideration. Three forms, more or less distinct, can be recognized, viz., acute dyspeptic diarrhoea, cholera infantum and acute entero-colitis.

*Acute Dyspeptic Diarrhoea.*—This disease is chiefly due to errors in diet, which do not necessarily consist in the substitution of unnatural foods for the mother's milk. The mother's milk may be altered in quality by emotional causes, by improper food and improper hygiene. Or it may be caused by over-frequent nursing. More often, however, it is caused by the ingestion of unnatural foods.

There are also pre-disposing influences which facilitate the action of the exciting causes. These are especially dentition and the extreme heat of summer.

*The Prognosis* of the aforesaid disease among the better classes is commonly favorable, but among the weak, puny and half starved children of our lower east side, large numbers perish, especially during the summer months.

*The Old Time Treatment* in these cases was a primary purge, calcined magnesia, or castor oil. After the purge bismuth sub-nitrate or prepared chalk was given. Since the introduction of Glyco-Thymoline (Kress) the above mentioned methods have been cast aside. A very good and effective prescription which has given me most splendid results in these kind of cases, in conjunction with a carefully restricted diet, is

℞ Bismuth Sub-nitrate	Dr. I
Tr. Opii Deodoratum	M. X
Glyco-Thymoline	Oz. II
Aqua Rosarum Ad Q. S.	Oz. IV
Misce et	



Sig. Dr. 1 every three hrs. (For a child one year of age.)

*Cholera Infantum*, a variety of acute catarrhal enteritis of intense severity, corresponding in symptoms and course to cholera morbus in the adult, but much more serious in termination.

*Prognosis* in these cases is at best not very favorable, although recovery is not impossible.

*Treatment* of these cases is of quite a different nature from those above mentioned. In the first place the fever must be combated, and I know of no better method than a bath containing some Glyco-Thymoline, at about 80° F., reduced by adding small pieces of ice to 70° or 65°. Next pain, to reduce pain, 100th of a grain of morphine sulphate can be administered to a child of one year. Stimulation with strychnia hypodermically, iced champagne to prevent vomiting; brandy, whiskey and other stimulants.

One of the best methods for irrigating the large intestine is by introducing a small, soft catheter through the rectum and injecting into the bowel about a pint and a half of warm water containing about 25% of Glyco-Thymoline. This I find removes and prevents the re-accumulation of the fermentation as well as the putrefactive products of the bowel. Should, however, the hyperpyrexia continue the douche may be given at a lower temperature. During convalescence great care must be taken in the feeding of the patient.

*Acute Entero-Cholitis* is an affection of inflammatory nature more severe than dyspeptic enteritis, chiefly of the ileum and colon, affecting especially the lymph follicles. This, like the preceding, is a disease of the hot months of summer, and the period of teething, especially. It is produced by the same causes as dyspeptic diarrhoea. It is most frequent during the ages of 6 and 18 months. It likewise may be a termination of dyspeptic diarrhoea or of cholera infantum.

*Treatment*:—The general surroundings and hygiene necessarily play an important part. The medical treatment, however, is somewhat different. Anodynes are more imperatively demanded because there is greater suffering, and depletion may be needed in the beginning, by salines, though good judgment is required because the child's strength must be watched. The colon should be flushed with a solution of Glyco-Thymoline having a strength of 25%. This I find answers admirably in these cases. The solution may be made with iced water. The coming teeth should likewise be watched

and the gums be scarified whenever required.

I will supplement my remarks by adding a few of the many cases treated with Glyco-Thymoline and let results speak for themselves.

CASE No. 1.—M. K., aged 8 months, male, was taken with severe vomiting and colicky pains at night. The vomita contained lumps of coagulated milk. The stools were very offensive and recurred at intervals of 20 minutes. I left a prescription for Glyco-Thymoline 2 oz., Bismuth sub-nitrate one drachm, rose water enough to make 4 oz. I called the next morning and found but little improvement in my patient, and at once flushed out the bowel with a 25% aqueous solution of Glyco-Thymoline, and continued the prescription given the night previous. This treatment was continued for three days, the patient steadily improving during that time. I recommended that the child be taken away from the city, which was done. I heard later from the parents that the child had not had a relapse, but made a speedy recovery.

CASE No. 2.—Mary C., age 7 months and a half, was brought to my office, her little knees drawn up, a look of anguish on her face, which was pale and drawn, with eyes protruding. She had a number of watery discharges from the bowels, incessant vomiting, a temperature of 103½, a rapid and feeble heart. A further examination of this poor little tot was unnecessary. Anodynes were at once administered to soothe the pain. I washed out the bowels with a 4% solution of Glyco-Thymoline and administered the same in a 50% solution with peppermint water internally in doses of a teaspoonful repeated every two hours. The results in this case far exceeded my expectations. The child made a slow but successful recovery.

CASE No. 3.—L. P., male child, age 16 months; was called to check the diarrhoea, which was of a serious character, having a tinge of blood. The vomiting was not of a severe nature, the only alarming symptoms the child showed were the intestinal ones. Three separate washings of the child's colon were made at intervals of six hours. The child's food was restricted to barley water; this case, like the one preceding, made a perfect and speedy recovery.

CASE No. 4.—R. A., a little tot of the east side, aged 13 months, brought up in one of the dark and dingy rooms of a tenement house; this poor little one was suffering for five days before my attention was called to

the case. I found it in an emaciated condition, unable to move a limb, the bowel movements were frequent and watery; the little one was on the point of collapse; strychnia was administered hypodermically to stimulate the heart, after which diluted brandy was given every half hour. The colon was irrigated with 24 oz. of a 50% aqueous solution of Glyco-Thymoline; I had the child under my observation for two and one-half weeks, and with proper food and fresh air the child made a good recovery.

CASE No. 5.—M. M., a boy baby seven months of age, teething and causing all sorts of trouble for its parents who were well to do. Was summoned to the house early one morning, found the little one vomiting quantities of curdled milk, and movements having a decidedly fetid odor. I tried most everything in this case and received but small relief by the use of Glyco-Thymoline. Upon careful investigation I found that the teeth were causing the trouble; the gums were then lanced and the child's diet restricted; that is the breast feedings were given at three hour intervals and only lasting five minutes at a time. Glyco-Thymoline was kept up, with perseverance and good nursing our little one soon got well.

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### The Disease of Money-Getting.

By REBECCA HARDING DAVIS.

We were delayed one day last summer at the toll gate on a lonely road in the Virginia mountains. The son of the gatekeeper at the moment came hurrying across the field.

"I've got the job, father!" he shouted, waving his hat. "Sixteen dollars a month!"

The old man stared at him open mouthed, forgetting to give us our change. "Sixteen dollars a month! Why, you kin git married now, Bob, right away and set up housekeepin'! You kin lead a man's life now, sah!"

We laughed as we drove away at the mountaineer's idea of the things necessary to a man's life. He must belong, we said to a generation of two centuries ago.

Some one then told a story of a man he knew in Denver or St. Paul or some other crowded, driving Western city. He had been all of his life a bookkeeper on a small salary. When he was a young man and the city a village he had bought for a few dollars a huge square of ground on the principal street and had built a snug little house on it and planted a garden for his young wife. Now that they were gray old folks of seventy they still lived in the house, hedged in by

cabbages and roses, the mossy old well in one corner of the garden, the beehive in another.

The lot was now surrounded by huge business houses and was of enormous value.

One firm after another offered the old man sums for it which would make him rich for life.

"You can give up work if you sell," they said, "and take your place among the millionaires of the state. You can build yourself a palace out in the country and have nothing to do but turn over your money and make more and more millions."

"My wife and me," he said, "wouldn't be comfortable in a palace. We are comfortable in this house. It's home. I don't want to rake in millions. We have enough. I'm able for my work—it doesn't hurt me. We have no children to leave a fortune to. Money in bank wouldn't give my wife as much comfort as her posies and bees do. No, won't sell."

He is still living in the mean little house and picks strawberries for his old wife's breakfast from ground that is worth a thousand dollars a foot.

We laughed again and some one else recalled the story of another madman who was as ignorant of the value of money.

"My guide," he said, "when I was fishing in Florida last spring showed me one day a tract of land on the river bank. 'That's my ground,' he said. I've got fifty acres there. I have cleared three acres an' put it into lettuce for the Northern market. It brings me in a hundred dollars a year."

"Why not clear the whole of it," I asked, and put it into lettuce? Then you would have thousands of dollars a year instead of one hundred."

"He stared at me. 'A hundred's enough fer me with what I make fishin'. Why should I slave fer money I don't need?'"

"'But you do need it,' I urged, and told him of some of the luxuries he could buy with more money. Besides, I argued, he should have money laid by in bank. He did not answer for a while and then said:

"'No, I'm in the right of it. Ther's only me an' my boy. Bob's hed good schoolin' an' is makin' his own way in Jacksonville. Ef he wants more money he can come an' plant more lettuces. I've a snug cabin yonder, an' what with fish an' game an' a pig I've enough to eat. I like to look into politics a bit an' I'm fond o' readin'. The hundred dollars pays for my newspapers an' books. Ef I worked more land I'd hev money in bank, as you say, but I'd hev no

time for politics nor readin'. No. Ther's other things than money. Enough of it's enough.'

"He was a good guide," continued the fisherman, "but a queer fellow. He never planted more lettuce. I often wonder whether he was quite mad in that matter or eminently sane."

When I read in *The Independent* the other day the discussion upon the Concentration of Wealth it brought to my memory these ignorant feeble folks who, because they valued money only for what it would buy, we ridicule as mad. They seem more feeble and more mad in the light of these discussions of the power of wealth.

I wonder, by the way, if the younger generation of Americans are conscious of how rapidly wealth is becoming the one object that dominates our horizon? The greed for money has been developed among us since the Civil War, with the force and swiftness of an epidemic. Before that war there were very few large fortunes in this country. The man who accumulated two hundred thousand dollars was looked upon with awe as a Croesus. We had no huge, splendid cities then, hotbeds of luxury. The Western, even the Middle States were sparsely settled; the majority of our people lived in the villages or little towns, where the conditions of life were simple and inexpensive. The great man of the town probably lived in a pillared wooden mansion on an income of two or three thousand per annum. He had a Brussels carpet on his parlor and a pair of Vito Viti's alabaster vases on the mantel shelf. His wife owned a single velvet gown, which gave her royal state for life. The yearly incomes of the less lucky men of the village—clerks, cashiers, storekeepers, lawyers or doctors—usually ranged from four hundred to a thousand dollars. Living, on the other hand, was cheap. Butter and beef at ten cents a pound, a cow in the "lot" pigs in the sty and a garden full of vegetables and fruit supplied food. In the clothes press were a Sunday broadcloth suit and a silk gown; they would last for many years. There were no operas, no pictures, no costly journeys to absorb money. The man who had been in Europe was regarded with wonder; men talked to him with bated breath. These men and women knew nothing of art nor the stage nor the countless luxuries which are necessities to their grand children. Yet they were of honorable birth, gentlemanly, God-fearing, and, as a rule, with as sound a literary education and taste as the

majority of their grandsons. Human nature was, of course, the same then as now. But as there were fewer uses for money, it rated lower among the good things of life than it does with us. In the code of our church going, Bible-loving ancestors there was something vulgar, even wicked, in the greed for riches. Every community had, of course, its misers and shrewd money-grabbers. But their aims were regarded as plebeian, their place in society was below the salt. Little thought was given to ancestry. Education was held to be the chief good and object of ambition. "Professional men" were indisputably the upper class. Every ambitious mechanic or poor farmer struggled hard to push at least one of his boys through college and to make of him a lawyer, doctor or minister.

Then came the Civil War. When it was over some of the successful army contractors first taught us how fast and how high an ignorant, underbred man could climb in the community upon a heap of dollars. Then followed the oil speculation, the development of the railway systems; after that came the formation of the great trusts. The American has now grown used to look upon gigantic accumulations of wealth, and it may well be that his eyesight is a little impaired by their perpetual glitter. Dwellers under the luster of Mt. Blanc, it is said, see other things but dully and no longer can measure distances justly.

More can be bought with money now in the United States, perhaps, than anywhere else. Luxury, political power, a certain social position—all have their price. Haman occasionally may be vexed, as of old, by some scholarly Mordecai sitting at the gate, who watches his noisy pomp with a quiet, amused smile. And yet the poor gentleman Mordecai has common sense. He knows that with a little heavier account in bank he could send his consumptive boy to Florida or the Adirondacks, and that without it he must die. Mordecai is not a slave to Mammon, but he is human, and he, too, joins the multitude in the frantic struggle of money-getting.

Who can live outside of it?

Life rises before the young American now as the enchanted palace did before Jack in the old fairy story. Behind its closed doors wait wonders of which his grandfather knew nothing, the triumph of art and science, the joys of travel, of power, of society, of luxury. But the doors open, he thinks, only to golden keys. How, without a great fortune, can he sail in his yacht to unknown

climes, or build a castle like Biltmore, or buy Titians, or endow colleges, or, most coveted joy of all, enter the Smart Set of his native city? The huge accumulations of wealth in the last two or three years by a few individuals and by the trusts seem to have maddened the brain of the nation just as a noxious disease infects a body.

The majority of the writers in your symposium the other day based their remarks upon the acknowledged fact that the ruling power in this country now was not the love of liberty or patriotism or God, but—the Dollar.

Our recent writers on sociology recognize the recent change in the values which we set upon the things of life. Our old idea of a higher class to be imitated, men and women of honest parentage, of gentle breeding and high purposes, is, we now hear, stale and fantastic. Our House of Lords, we are told, "is already incorporated. They are the Plutocrats of New York. They soon will give us a syndicated Presidency."

The faith of the old-time American in the republic as the one land on earth where all men are free—where government exists only by the consent of the governed—is jeered at and thrust aside. "Neither the constitution nor the old prejudices in favor of liberty, nor the dead hand of Washington," we are told, "shall be allowed to interfere with the gigantic business interests of the country."

Under this ruling even the meaning of words has changed lately for Americans. The successful man is merely the rich man. The national progress of which we boast so loudly just now does not mean advance in science, in art, or learning, or in the nobility or distinction of individual life, but simply commercial progress. The popular policy of Imperialism is, stripped of verbiage, merely the seizing of territory and subjugation of foreign peoples with whom we have no quarrel, by force, in order to increase the national wealth.

To put money into the Treasury we admitted slavery into the States again without a protest. Professedly a Christian people, we look on in silence while our army was sent to conquer an intelligent race, capable of self-government, who were struggling for their freedom. When our soldiers reviled some of the most brutal tortures of the Middle Ages to subdue them we are silent, and when General Smith ordered the extermination of women and children over ten years of age we forgave him. Why? Because torture and wholesale murder were "necessities

of war," and this war is going to put money into our pockets.

Our doings in the Philippines have been recited with many lofty phrases. But there, in homely English, is the meaning of them.

To measure how deeply this cancer of avarice has eaten into the national character, look for a moment at the list of pensioners. Not at the honest men who were disabled in the service of their country and who deserve her grateful and tender care while they live, but at the huge body of willing paupers who once rendered her a short service, for which they were amply paid at the time, and who, though able and strong, have fed upon her ever since. Not one man among them, apparently, has found sufficient reward in the proud consciousness that he served his country in her hour of peril. He chooses rather to take pay and more pay in dollars and cents from her every month while he lives.

Jesus Christ held an ideal man before the world, pure, bold, unselfish, giving his life to serve God and to help his brother. That man has drawn humanity upward for nineteen centuries.

But now we have a new model. "Get money," shouts the modern teacher to our boys. "Why should you starve? Treat yourselves to the best of life as did the young Roman in the days of Augustus. Get money—*Rem facias*—it is the only good!"

But in our universal, wild rush to the feet of the golden calf, can we not go back for a moment to facts, to plain common sense? The ruler of Wall Street—what are the realities of life to him? His millions, or his aching jaw, his drunken son—the woman whom he loved who is dead? Do the millions actually buy him rest, comfort, happiness? Do they give him any hold upon the world into which he soon must go, and go without a dollar?

There were men richer than he in the old Roman days who often sat, smiling, to watch the superb lions in the arena below while the followers of a miserable Galilean Jew were fed to them.

They are gone and Rome is gone. But the Galilean still lives.

In the fury of our haste to be rich I often think of those ignorant folks of whom I told you who valued money only for the rest and content it could buy, and knew when they had enough of it.

Are they mad or more sane than any of us?—*The Independent*.

The following persons passed a satisfactory examination before the Board of Registration of Medicine in Portland last week, and were registered as Physicians and Surgeons:

- John Howard Allen, M. D., Portland, University of Pennsylvania.  
 Willard Asa Bates, M. D., Augusta, Dartmouth.  
 Elborn Taylor Bowers, M. D., Lewiston, Tufts Medical School.  
 Maurice Ozro Brown, M. D., East Dover, Baltimore Medical College.  
 Sidney R. Carsley, M. D., New Portland, University of Vermont.  
 Henry F. Collins, M. D., Franklin, Columbian School, Wash., D. C.  
 Rowland Cox, Jr., M. D., New York City, College of Physicians and Surgeons, New York.  
 Donald Brett Cragin, M. D., Farmington, Harvard Medical School.  
 Hugh Francis Bolan, M. D., Bangor, University of Vermont.  
 Franklin A. Ferguson, M. D., Boston, Mass., Boston University School of Medicine.  
 Walter H. Flanders, M. D., Melrose, Mass., Harvard University School of Medicine.  
 Joseph L. Gagnon, M. D., Lewiston, Laval University, Montreal.  
 Norman John Gehring, M. D., Bethel, Medical School of Maine.  
 Everett V. Hardwick, M. D., Auburn, Harvard Medical School.  
 George Stephen Hatch, M. D., Boston, Mass., Medical Department University of Michigan.  
 Leonard F. Hatch, M. D., Lynn, Mass., Medical Department University of Michigan.  
 Henry Hawkins, M. D., Bangor, University of Pennsylvania.  
 George L. Hilton, M. D., Bangor, College of Physicians and Surgeons, Baltimore.  
 Richard T. Leader, M. D., Lewiston, Medical School of Maine.  
 Mary E. McLeod, M. D., St. John, N. B., Northwestern University, Chicago.  
 George B. Mitchell, M. D., Kane, Pa., Hahnemann Medical College and Hospital, Philadelphia.  
 Alden R. Newhall, M. D., Lynn, Mass., Dartmouth Medical College.  
 Laura Fellows Noyes, M. D., Boston, Mass., College of Physicians and Surgeons, Boston.  
 Ernest S. Osborn, M. D., West Rochester, Tufts Medical School.  
 Edwin F. Pierce, M. D., Lewiston, College of Physicians and Surgeons, Columbia U.  
 Joseph W. H. Porter, M. D., Old Town, University of Pennsylvania.  
 Richard Henry Stubbs, M. D., Strong, Harvard Medical School.  
 Herbert Leonel Taylor, M. D., Portsmouth, N. H., Jefferson Medical College, Philadelphia.  
 Alba Gustavus Walker, M. D., Boston, Mass., College of Physicians and Surgeons, Boston.  
 Russell D. Walton, M. D., Orono, College Physicians and Surgeons, Baltimore, Md.  
 Herbert B. Wilcox, M. D., New York City, College of Physicians and Surgeons, New York.

Also Louis F. Bishop, M. D., of New York, was registered in reciprocity with the State of New Jersey without examination, and the certificate of George W. Carroll, of Bethel, was revoked.

### Complicated Anæmia.

By T. J. BIGGS, M. D.

Ruth K—, age 14, American, admitted November 14th. Diagnosis: Essential anæmia.

The patient had been sent to me by Dr. B—, who said that in spite of all treatments employed, his little patient had grown steadily worse, and the parents were well-nigh discouraged. Her condition was associated with menstrual disorders; a year previous she said her disposition seemed to change. She found she was becoming morose and despondent, at times hysterical, and suffering very much from melancholy. Her menstrual order was of the menorrhagic form; her complexion was pallid, waxy, skin puffy without oedema; she was easily fatigued upon the least exertion; the heart was irritable; there was shortness of breath, pulse full, but soft, and at times pulsations in the peripheral veins. There was a disgust for food, imperfect digestion and occasional attacks of gastralgia. In the right apex there was a suspicious dullness, indicating a possible incipient phthisis. Examination of the blood showed a relative decrease in quality and quantity of the hemoglobin, resulting in the blood being paler than normal. The red corpuscles were lighter in color and showed less tendency to form rouleaux; their character was changed, not being of uniform size, some normal, others small (microcytes), others unusually large (macrocytes), others irregularly shaped (poikilocytes). The number of corpuscles to a cubic millimetre was about 2,500,500. The white corpuscles were considerably increased in number. A few granular bodies were present, indicating degeneration of the white corpuscles.

The patient was put to bed, secretions regulated, and a half teaspoonful of bovine was ordered every hour in peptonized milk.

On November 18th, the bovine was increased to a tablespoonful every two hours.

November 30th, the bovine was increased to a wineglassful every two hours, given in peptonized milk, alternating with old port wine. The patient at this time showed some improvement, felt stronger, slept better, digestion seemed excellent, bowels regular, and she slept throughout the night quietly.

December 10th, microscopic examination of the blood showed increased quantity and quality of hemoglobin, and red blood cells 3,000,000 to the cubic millimetre.

December 18th, the patient had gained seven pounds in weight, color good, puffiness of the skin disappeared, and she was taking daily exercise in the open air without suffering fatigue.

December 24th, microscopic examination of the blood showed hemoglobin almost normal, the red blood cells about 4,500,000 to the cubic millimetre, general condition splendid.

On December 26th, patient was discharged, cured.

The complete, thorough and rapid cure in this case was undoubtedly due to the blood treatment, for all through her course of treatment, outside of cathartics and some mild heart stimulant, she took absolutely nothing but bovine. Bovine acts in anæmia in all its forms by first stimulating the blood cells to a healthy proliferation, and secondly, by properly and thoroughly supplying perfect nutrition, carries them on to a full and healthy maturity. Iron in all its forms, while at first undoubtedly beneficial, can only go half way, for it simply stimulates the proliferation of the blood cells and supplies only partial nutrition, the result being that in the majority of cases where it is employed alone, many of the newly born cells, for lack of proper nutrition, atrophy, or become granular bodies.

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#### **A Case of Carcinoma of the Distal Extremity of the Vermiform Appendix, with Specimen.**

Dr. Charles McBurney reported this case. The patient was a woman twenty-three years old, who gave a history of having had an attack of what was clearly appendicitis, about two years before she came under the speaker's observation. This attack was evidently a severe one, with a temperature as high as 105° F., but after about ten days the symptoms slowly subsided, and the patient remained well with the exception of a feeling of pain and discomfort in the right iliac region when she made certain movements, or took active exercise. About two months ago, however, pain in the region of the appendix became much more pronounced, and soon grew so severe that it entirely prevented the patient's usual activity. No rise of temperature or pulse occurred.

When Dr. McBurney saw the patient, her general health was apparently very good. She had no fever. An examination showed a very sensitive appendix and an operation was undertaken for its removal. It was found to be about four inches long, and was

greatly thickened and enlarged, but there were no attachments in the form of adhesions and no disturbance of the peritoneal surface of the appendix. After removal of the appendix it was found to contain two strictures, one near its base, the other near its apex. Near the apex was a small tumor, about the size of a green pea, quite solid and white in appearance on section. It was sent to Dr. Hodenpyl for examination, and he reported that it was a pure carcinoma. It was doubtless primary, as the patient gave no symptoms of malignant disease elsewhere in the body.

Dr. McBurney said this was the first case of primary carcinoma of the appendix that had ever come under his observation. Through Dr. Hodenpyl, however, he was able to secure a second specimen of the same kind, which was removed post-mortem by Dr. Lartigau from a man about thirty years old, who had given no history of appendicitis. At the apex of his appendix a rounded tumor was found. It was considerably larger than the one found in Dr. McBurney's case, and an examination showed that it was pure carcinoma. The microscopical appearance of both was remarkably similar.

Dr. McBurney said that quite a number of cases of carcinoma of the appendix have been reported, but they were all, so far as he knew, cases where the disease was more or less extensive and the appendix was involved together with other organs.

Dr. Peabody said there was no reason carcinoma should not occur primarily in the appendix, although it was certainly rare in that situation. It was rather curious, however, that a young woman of twenty-three should be affected with the disease.

Dr. Kinnicutt said that another interesting feature of the case was the constant pain in the right iliac fossa from which the patient had suffered during the past two years, and from which she had been entirely relieved by the operation. The organ was free from any adhesions, and the only explanation he could offer for the pain was the presence of the two strictures, with perhaps the retention of secretions.

Dr. Robinson said he had long been waiting for a case which might be termed typical of gouty appendicitis, and during the past winter what he regarded as such a case had come under his observation. The patient had long suffered from a skin trouble which was of a gouty nature, and in addition to this he had recurrent attacks of pain in the region of the appendix. The appendix was removed by Dr. W. T. Bull, and found to be

the seat of a catarrhal inflammation, similar to that met with in the tonsils, ovaries and elsewhere, particularly in gouty individuals. Ultimately, Dr. Robinson said, we may reach the conclusion that organs like the tonsils and appendix have some valuable function to perform and that they should not be removed with too great freedom.

Dr. McBurney said that pain was complained of in a fair number of cases of chronic appendicitis, and is probably due to the presence of strictures, with the consequent retention of material, and also perhaps to the inflammatory thickening. The speaker said the case he had reported was a good example of the advantage of removing the appendix with as little delay as possible when that organ is suspected of being the seat of disease. In the case under discussion it is extremely probable that within two or three months the disease would have invaded the peritoneum and neighboring viscera, with the formation of extensive adhesions, and then complete extirpation would have been impossible. It is particularly in chronic cases of appendicitis that a patient can be easily relieved of an organ which is capable of causing serious disease and even death, and relieved in such a way that there is absolutely no harm done to the individual. On the contrary, the life of such an individual is more valuable after the appendix is removed. The operation is attended with little or no danger, and there is no resulting mutilation.—*The Medical Record*.

### News and Abstracts.

The American Electro-Therapeutic Association will hold their annual meeting at the Hotel Kaaterskill, Catskill Mountains, New York, on the 2d, 3d and 4th of September, 1902. Scientific papers, discussion, local excursions, concerts, balls, banquet, special parlor entertainments. Reduced rates to members, their families and friends.

GEO. E. DILL, M. D., *Secy.*

Dr. Geo. H. Emerson will pass the winter in the highlands of southern North Carolina, where he will devote his time to the treatment of cases of pulmonary disease exclusively. Physicians having patients that they would like to send to a milder climate where the open air treatment can be carried out successfully throughout the entire winter, can communicate with him at Bucksport, Me., any time prior to Oct. 15th.

### Getting on the Horse's Nerves.

The horse, the most useful of all animals, is the one marked for the most of man's ill treatment. For the most part housed in ill-lighted, ill-ventilated and ill-smelling quarters, worked to its full capacity, cared for only to the degree that selfish interest prompts, the animal is delivered over as the unprotected object of the unrestrained passions of man. The average man fails apparently to understand that animals have a nervous system, among them in a marked degree the horse, and that were he to govern his own temper he could with a little patience get control of the horse's nervous system and make out of it a servant vastly more efficient than he is under the system in which he beats and jerks and drives it to distraction.

A short walk in any city will discover many blind horses. Why? There are no blind cows, comparatively. And yet the sight of the one naturally is as good as that of the other. The difference is simply that the horse from the beginning has been abused, ill-housed, overworked and worked under conditions that have driven him blind.

Its eyes are shut in by blinders at each side, for which there is no use but to satisfy the caprice of fashion of man. So its vision interfered with, and deprived of air, the wonder is that with the other treatment it gets it is not blind oftener. Besides this in other cases its neck is almost pulled out of joint by overhead check-reins that raises its face to the air and turns its eyeballs to the glare of the sun unprotected. Or, on the other hand, deprived of check-rein, it is bitted with a curb that pulls its jaws to its breast and tortures it in this fashion. And then, according to the spreading fashion of the day, it is subjected to that most cruel of all practices, docking, which not merely tortures in the practice, but leaves it to the torture of flies for the rest of its life.

If it is the merciful man that is merciful to his beast, and if it is the merciful that obtain mercy, we have, as a people, some way to come before we can get that blessing.—*Indianapolis News*.

HE KNOWS THE GUILTY PARTY.—The ten-year-old boy who was sent away from home at the time his new brother made his appearance was told by the nurse upon his return that during his absence the stork had brought him a little brother, replied: "Stork nothing; didn't I see Dr. Smith's old mare tied out here last night?"



# Phillips' Emulsion

50% best NORWAY COD LIVER OIL  
minutely sub-divided,  
WITH WHEAT PHOSPHATES (Phillips')

Pancreatized, Palatable, Permanent, Miscible in Water, Milk, Wine, etc.

# Phillips' Milk of Magnesia

Mg H<sub>2</sub> O<sub>2</sub> (FLUID.)

"THE PERFECT ANTACID."

for correcting Hyperacid conditions—local or systemic.  
Vehicle for Salicylates, Iodides, Balsams, etc.

# Phillips' Phospho-Muriate of Quinine, COMP.

TONIC AND RECONSTRUCTIVE.

WHEAT PHOSPHATES, WITH MURIATE OF QUININE AND STRYCHNINE.

PHILLIPS' WHEAT PHOSPHATES (ACID).

PHILLIPS' SYRUP OF WHEAT PHOSPHATES.

PHILLIPS' DIGESTIBLE COCOA.

THE CHAS. H. PHILLIPS CHEMICAL CO., NEW YORK.

## MELLIN'S FOOD FORMULAS

We issue a BOOKLET of physi-  
cians' formulas for the

### *Home Modification of Fresh Cow's Milk.*

This Formula Booklet also gives  
other combinations of fats, pro-  
teids and carbohydrates to suit  
varying conditions.

We should be pleased to send  
you the Formula Booklet free of  
charge.

This is a sample page:

### FOR INFANTS ABOUT SIX MONTHS OLD RICH MILK

*Mellin's Food,*  
2 tablespoonfuls (heaping)  
*Rich Milk,* 12 fluid ounces  
*Water,* 4 fluid ounces

The analysis of this mixture is as follows:

FAT . . . . .	3.10
PROTEIDS . . . . .	3.00
CARBOHYDRATES (no starch) . . . . .	6.90
SALTS . . . . .	.79
WATER . . . . .	86.21
	100.00

MELLIN'S FOOD COMPANY, BOSTON, MASSACHUSETTS

No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.

### A New Method of Radical Cure of Hydrocele of the Tunica Vaginalis Testis.

By T. HOPE LEWIS, M. R. C. S. Eng., L. L. A. Lond.  
Honorary Surgeon, Auckland Hospital, New Zealand.

The following method of dealing with hydrocele for its radical cure will be found to be as nearly perfect as can be. Surgeons who are accustomed to the operation of cutting away the sac down to its attachment to the testis are well aware that at the end of this act there is often a considerable amount of arterial bleeding to be controlled. By the method about to be described all this is done away with.

The scrotum having been prepared for operation according to the directions of the surgeon, a transverse incision is made over the centre of the side on which the hydrocele exists. The incision on the distended skin may be three inches long. The sac must be defined and incised longitudinally. The fluid is completely evacuated and the wound flushed with sterile water or 1-500 biniodide solution. The forefinger now explores the sac and draws the testicle and collapsed sac out of the skin incision. The sac is then slit up from top to bottom and at once turned inside out. The edges of the sac are now stitched together in their new position. It may be necessary to put in only two or three interrupted fine catgut sutures. The testicle, etc., should be then returned into the scrotum and the skin wound closed according to the usual method of skin closure employed. Dressing as usual—collodion or cyanide gauze.

It is almost a bloodless operation; one or two small skin or sac vessels may require firm pressure or ligation. Its simplicity is its great recommendation.

It will be seen by this method that the sac ceases to exist as a sac, but forms an enclosure for the cord. It cannot secrete in such a position, and speedily atrophies and causes no trouble. I am well pleased with the operation, having had excellent results, and can strongly recommend it to the practice of surgeons.—*The Therapeutic Gazette*.  
Auckland, New Zealand.

### Kno-Bug. Another Insecticide Fraud.

Under the name of "Kno-bug" the Carpenter-Morton Company of Boston, are putting on the market a reddish brown powder for which they make the following claims:—"Kno-bug is a preparation to destroy potato bugs and all other bugs that eat leaves,

plants or vines. It not only destroys the bugs but unlike Paris green acts as a vegetable tonic and stimulates the growth of the plant, prevents blight scab and rust."

Kno-bug contains quite a number of materials but is chiefly made up of land plaster (87 per cent.), saltpetre (4 per cent.) ochre (2 per cent.) Paris green (2.5 per cent.) The remaining constituents are sand, clay and a little water. The ochre is evidently added to color the material so the plaster will not be readily recognized; the saltpetre is added presumably to give ground for the claim that it acts as a fertilizer. The clay and sand are probably impurities of either the ochre or the plaster. Whatever value the goods have as an insecticide depends upon the 2.5 per cent. of Paris green. No treatment of vines, so far as known, will prevent scab and there is nothing in the goods to prevent blight. Applied in sufficient quantity, the Paris green contained in Kno-bug will kill potato bugs.

These goods sell, according to the advertisements of the Company, for 10 cents down to 5 cents per pound in accordance with the size of the package. With 2½ pounds of Paris green and 100 pounds of plaster mixed together the farmer would have a material for practical purposes identical with Kno-bug at a cost of less than one cent a pound.

Apparently it is the purpose of the manufacturers of Kno-bug to deceive farmers afraid of Paris green into buying a preparation which depends upon Paris green for its value as an insecticide and at a cost from 5 to 10 times the value of the goods.

CHARLES D. WOODS,

Orono, June 27, 1902.

Director.

TO GUARD AGAINST THE BITE OF THE MOSQUITO.—McIntosh recommends an application for this purpose in the *Medical Record*, which he has used for some years when out fishing or hunting in swamps, where mosquitoes are prevalent, and in the evenings when sitting out-of-doors, and which he has found to be most excellent and efficient; it is the oil of citronella (oil verbenia, Indian melissa oil). It has a very pleasant odor and is not expensive. The oil should be rubbed into the exposed parts and repeated occasionally, or the following is quite as efficient:

℞ Ol. citronella,  
Alcohol, aa 3 j.

Sig. Apply freely to face, neck, hands and ankles to prevent mosquitoes from biting. This is colored with something to make it slightly green.—*N. E. Med. Monthly*.

THE BEST RESULTS ARE ASSURED IN BROMIDE  
TREATMENT WHEN YOU SPECIFY

# PEACOCK'S BROMIDES

AND THE GENUINE IS DISPENSED.



NEUROLOGISTS and General Practitioners prefer it because of its superior qualities over the commercial salts. . . Each fluid drachm represents fifteen grains of the combined chemically pure Bromides of Potassium, Sodium, Ammonium, Calcium and Lithium.

DOSE: ONE TO THREE TEASPOONFULS, ACCORDING TO THE AMOUNT OF BROMIDES REQUIRED.

# CHIONIA

From CHIONANTHUS VIRGINICA.

RE-ESTABLISHING  
portal circulation  
without producing  
congestion. Invaluable  
in all ailments due to  
hepatic torpor.

Hepatic  
Stimulation.

Without  
Catharsis.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES A DAY.

FOR CLINICAL TRIAL WE WILL SEND FULL SIZE BOTTLE TO  
ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

PEACOCK CHEMICAL CO.  
ST. LOUIS, MO., U. S. A.

In CARDIAC and GENERAL MUSCULAR RELAXATION,  
due to Functional Cardiac and Circulatory Disturbances,

# CACTINA PILLETS

Has many Advantages over other Heart Stimulants.

IT HAS NO CUMULATIVE ACTION, AND  
IS ABSOLUTELY SAFE AND RELIABLE

EACH PILLET REPRESENTS ONE ONE-HUNDRETH OF  
A GRAIN CACTINA, THE ACTIVE PROXIMATE PRIN-  
CIPLE OF CEREUS GRANDIFLORA

DOSE: ONE TO FOUR PILLETS THREE TIMES A DAY.

SAMPLES MAILED TO PHYSICIANS ONLY.

The CHIEF Characteristics of the Physiological Action of

# SENG

Is to promote Normal Digestion by encouraging the flow of Digestive Fluids.  
It is the Modern and Most Successful Treatment for  
**INDIGESTION.**

A PALATABLE PREPARATION OF PANAX SCHINSENG  
IN AN AROMATIC ESSENCE.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES  
A DAY.

A FULL SIZE BOTTLE, FOR TRIAL, TO PHYSICIANS WHO WILL PAY EXPRESS CHARGES.

SULTAN DRUG CO., St. Louis, Mo., U. S. A.

No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.

### Reaction Among Mental Healers and Faith Curists.

Some recent reactions in circles previously devoted to the entire repudiation, not to say vilification, of medical science are worth noting. First: Newspapers report that vaccination has been allowed in Dowie's "Zion," and that this leader, being unable to save his own daughter from a painful death, sought the services of a practicing physician. Second: While cases, of course, are not published, owing to established professional ethics, it is well-known to the profession that physicians are nowadays often being consulted by Eddyites, even by prominent members of the sect, and that occasionally some of these are to be found in our hospitals. Third: The lecturer for a certain mental-healing society tells her followers distinctly that if they need a physician they had better go to one. However, this advice apparently contains a covert reflection on their inability to be helped by mental influence. Fourth: On account of the learning and practical life of the editor, the most dignified authority on current theory and practice of mental healing is a monthly periodical called *The Higher Law*. For the last year or two its pages have shown more and more acknowledgment of the physical factors in disease. It has been stated there that mental healers are specialists, that the whole truth lies deeper than mental healers have sounded. It is explicitly proposed that believers in the allness of the mind should study physiology, and so get a look at things from a new standpoint. "If a mind-curer helps you, well and good. But do not hesitate to learn from the best doctor at hand." Whether it involves hypocrisy and insincerity, or whether it is accomplished by honest steady-ing of the reasoning powers, it seems by all these signs that the light of common sense is sure sooner or later to break through any cloud of fanatic prejudice or wilful ignorance which may be raised in these days when so many of the real facts about disease can be readily known.—*Jour. A. M. A.*

The Mellin's Food Company has issued a very neat and artistic booklet giving facts in relation to Mellin's Food. Besides all this the book is a real work of art, giving well-known pictures typical of the several processes in the growth of cereals. The first picture is an excellent copy of Rosa Bonheur's "Oxen Ploughing," next is Millet's "The Sower," then Georges Laugee's "The Gleaners," and last Daubigny's "Springtime." The booklet

is printed on the best of paper and is handsomely bound. Every physician will appreciate the artistic excellencies of this booklet.

AN EXPERIENCED HAND.—"But, my good man, sheep-shearing requires a man who is used to the shears."

"Well, that's all right. I have been engaged for three years in preparing editorials for a country weekly."

### Substitutors Steal Physician's Patients.

Incidentally, the Antikamnia Chemical Company is after "Counterfeiters" and "Substitutors" with a sharp stick. Their work in New York City is, no doubt, well-known to our readers and they have now broken up a counterfeiting gang in New Orleans.

There cannot be two views on the subject of substitution. It is swindling, pure and simple. Antikamnia and Antikamnia Tablets are made only by The Antikamnia Chemical Company, of St. Louis, Mo., and when a physician prescribes either Antikamnia Powder or Tablets he means the products of that firm. If his patient does not get them, a fraud is perpetrated, not only upon The Antikamnia Chemical Company, but upon the physician and his sick patient for whom the medicine was intended.

In other words, the doctor's patient is taken out of the doctor's hands, transferred absolutely to the Substitutor's care and then given whatever remedy the substitutor thinks best. All this, irrespective of the doctor's diagnosis. In short, the treatment is in accordance with the "diagnosis" made by the substitutor. And as all substitutors are thoroughly saturated with avarice, greed and utter disregard of the most sacred rights of others, the fate of their victims can well be imagined. It is the purpose of The Antikamnia Chemical Company to expose and punish this crime wherever they locate it, and they have notified the trade that the least punishment "Substitutors" of this kind can expect, is exposure of their guilt.

FLATTERING RESULTS.—I have used Peacock's Bromides and Chionia with most flattering results. I regard Peacock's Bromides superior to any other preparation extant. I have been treating a very obstinate case of constipation with Chionia after I had exhausted my materia medica with no effect, and I am glad to say that the case was nicely cured, the pulse becoming regular as a clock. C. M. MAUPIN, M. D.

Webb City, Mo.

Doctor:

Are you preparing your patients for the Hay Fever season by administering the Suprarenal Substance? Treatment should be begun two or three weeks prior to the annual attack.

Specify Armour's when prescribing the Suprarenal Substance, as cheap saccharated and otherwise diluted preparations are not to be depended on.

Armour & Company,  
Chicago.

### Thiosinamine in the Treatment of Non-Malignant Stricture of the Esophagus.

Dr. L. Teleky reports several cases where the administration of thiosinamine was followed by softening and yielding of scar-tissue. In two cases of old-standing strictures, due to swallowing caustic potash, which resisted the passage of bougies beyond No. 17, after prolonged treatment, the administration of thiosinamine caused softening and yielding of the constricting tissue, sufficient to admit bougies up to Nos. 21 and 22. Teleky advocates the employment of this drug only in cases of at least six months' duration, as very recent scars may give way altogether under its influence. He instances a case where he administered thiosinamine twelve days after doing gastrostomy for esophageal stricture. Up to that time the fistula worked perfectly, and the stomach retained its contents, but after the first injection of thiosinamine the adhesions gave way with disastrous results. In cases of malignant disease its use is not advisable, owing to its lymphagogue action, which might lead to metastasis. Similarly, in patients who have healing tuberculous lesions in the lungs or elsewhere, it is contra-indicated, as cases have been recorded where inflammatory processes have been aggravated under its influence. Its employment is only indicated where it is desired to soften and stretch old-standing scars—e.g., in simple stricture of the esophagus, adhesions around joints, stricture of the urethra, etc.; any active inflammatory process is aggravated by its use. Dr. Teleky employs a 15-per-cent. alcoholic solution for hypodermic injection, injecting from 3 to 10 minims every second or third day.—*Merck's Archives*.

### Pruritus Vulvæ.

Pruritus Vulvæ may be due to a variety of causes, both of local and constitutional origin. Probably the most common is vaginitis or vulvitis, giving rise to irritation of the nerve filaments, which are laid bare by the desquamation of the epithelium over the inflamed area. In this form of pruritus the immediate indication in treatment is to reduce the discharge, which is the primary cause of the distressing itching and to render it as unirritating as possible by preventing its decomposition. This can be readily done by the use of the Micajah Medicated Uterine Wafer, which is at the same time astringent, antiseptic and alterative. At the beginning it will be best to dissolve a wafer in

about a pint of water and use it as an injection. Later as the irritation subsides, the wafer may be inserted every third day. It is always advisable to precede its use by a copious douch of hot water.

### Strychnine for Ileus after Abdominal Operation.

Following the recommendation of Martin, Grube (quoted in *American Medicine*, Aug. 24, 1901) has experimented with strychnine as a remedy for ileus after abdominal operation. The results are given in a series of 82 cases in which the drug was administered per os, and 35 cases in which it was administered subcutaneously. Per os, its influence upon peristaltic action was treble that obtained by the subcutaneous method.

Though he has not yet decided as to the real value of the remedy, Grube thinks the results obtained favorable. He has no hesitation in recommending the cautious use of strychnine subcutaneously. The effect of the drug in overcoming ileus and inciting peristalsis depends somewhat upon the preceding preparation of the patient, since the use of chloroform is unfavorable to peristaltic action from its general paralyzing characteristic, while morphine has little or no such unfavorable effect.—*Therapeutic Gazette*.

THE PECKS QUOTE HYMNS.—*Mrs. Peck*: "At Mrs. Strongmind's funeral today the choir sang 'When this poor, lisping, stammering tongue lies silent in the grave.' I think I should like that hymn sung at my funeral, Henry. Have you any better hymn to suggest?"

*Mr. Peck* (timidly):—"No, my dear. 'Transported by the view, I'm lost in wonder, love and praise'."

ANTISTREPTOCOCCUS SERUM IN SCARLET FEVER.—M. Girsdanský (*Pediatrics*, Vol. 12, No. 5) reports three cases of scarlatina treated with antistreptococcus serum, in which he met with the most favorable results. Following the injection of seven or eight c. c. of the serum, there was a decided drop in the temperature within 24 or 36 hours, the pulse and respiration were markedly improved, and there was rapid diminution of the exudate in the nose and throat.

In a series of 48 cases reported by Baginsky the mortality was only 14.6 per cent., being 10.8 per cent. less than the mortality in 238 cases treated during the same epidemic, but without the serum.—*The Chicago Clinic*.

# NOW WHAT IS IT?

"Read only that from which you may derive benefit."

Even these words are important only to those whose privilege it is to profit by them. Of course, we cannot hope to convince you by a mere statement when an actual, personal experience is needed to prove the truth of our assertion. But the professional experience of thousands of physicians is daily demonstrating the fact that "Colden's Liquid Beef Tonic" (Ext. Carnis Fl. Comp. Colden) composed of Beef, Iron, Cinchona, and Brandy (Prep. No. 1); and of Beef, Cinchona, and Brandy, alone, (Prep. No. 2)—represents the "ideal combination of a Food, a Tonic, and a Stimulant." This fact may persuade YOU to try it; the result of the trial will prove the truth of our assertion.

The CHARLES N. CRITTENTON CO., Sole Agents for the United States.

Laboratory: 115 and 117 Fulton Street, New York.

Samples sent free on application, to physicians.

THE ALKALINITY OF BLOOD SERUM

## GLYCO-THYMOLINE

ALKALINE, ASEPTIC, ALTERATIVE.

(KRESS)

In treatment of

### Summer Complaints and Dysenteric Conditions

Administered internally Glyco-Thymoline (Kress) acts as a carminative, antiseptic, alterative, stimulant, antacid and meets many of the requirements of the physician during the summer months.

\_\_\_\_\_, M.D., Cleveland, O., reports among other cases, as follows:

John T—, two months old baby, typical case of Cholera Infantum, had small hopes of saving the little one; put him on equal parts of Liq. Bismuth and Glyco-Thymoline (Kress), one-half teaspoonful doses every three hours. It controlled the vomiting and regulated the bowels and the child made a nice recovery.

\_\_\_\_\_, M.D., Washington, D. C., writes:

I have used Glyco-Thymoline (Kress) very successfully the past season in many serious cases of dysenteric troubles as also in other alimentary ailments with great benefit.  
Feb. 16th, 1900.

**SPECIAL OFFER** A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges

**KRESS & OWEN COMPANY, Chemists, 221 Fulton Street, New York**

**Corrects Hyperacidity and allays Enteritis**



**WAITING FOR RESULTS.**—There is quite a furor in Maryland over the efficiency of the virus of the honey bee as a cure for rheumatism, and the *Baltimore Sun* is authority for the statement that a wealthy German named Aprogie made a trial of it at an apiary owned by a Mr. Zacharias. He was clothed only in a shirt when he approached the hives. For some reason the bees did not attack him readily, and he proceeded to make them attend to business. He assaulted a hive with his cane and overturned it. Then he upset two or three more hives, bringing the bees to their senses. They, in turn, got mad. They assaulted Aprogie, who could neither leave his rheumatism on the scene of conflict nor get away with it. His lone shirt protected him not. The bees stung his equator and his tropics, his north pole and his south pole, his diameter and his circumference, his zenith and his nadir, his apogee and his perigee. Some of them left their stings sticking in his rheumatism so that he looked porcupiny. Then Mr. Zacharias had one of his men throw a long lasso over one of his feet, and, by the help of a yoke of oxen, draw him away from the apiary. Mr. Aprogie does not know whether or not his rheumatism is cured. He is now trying his best to get well of the remedy. The bees and the shirt are still in good condition.

**TURPENTINE AS AN ANTISEPTIC.**—According to the *Med. Record*, glycerinated turpentine may be used with success as an antiseptic in the treatment of wounds. Dr. Kossobudsk fills a sterilized bottle with glycerin and adds a small quantity of turpentine. This should be well shaken and allowed to stand for two days; then he adds a small quantity of a 5 per cent. solution hydrogen dioxide; it is then ready for use. As an antiseptic it checks excessive secretion when applied to wounds, relieves pain and swelling, and promotes the healing process. This action is thought to be due probably to the oxygen liberated and partly to the properties of the turpentine.—*Jour. Am. Med. Assoc'n.*

#### Sanmetto in Urinary Troubles in Old Men and Children.

So far as my experience has been with Sanmetto, in urinary troubles, it is one of the very best remedies we have at present. I recommend Sanmetto in urinary troubles in old men; also for children when subjects of that troublesome complaint, wetting the bed. I have practiced medicine over forty-five years.

A. D. H. KEMPER, M. D.  
Sedgwick, Kans.

Edwin H. Miller, M. D., City District Physician, Philadelphia, Penna., writes:—Last summer Glyco-Thymoline was suggested to me as a valuable adjunct in the treatment of Gastro-Intestinal conditions.

After a most thorough trial, I think it but just to say that its therapeutic value has quite exceeded my most sanguine expectations, and I have discarded my old time treatment in its favor.

**CRANBERRY THERAPY.**—Goriarsky (*Dietetic and Hygienic Gazette*) says: "The pure, fresh juice of raw cranberries, given freely, either diluted or with an equal part of water, is an excellent means of relieving the thirst in fever, and moreover is markedly antipyretic. In the thirst and vomiting peculiar to cholera it is even more effective. In fifty cases in which ice and narcotics failed to make the slightest impression, cranberry juice, in small but repeated doses, rapidly checked both vomiting and nausea."—*Denver Med. Times.*

**HIS SPECIAL USE.**—"Why do you carry such an expensive watch, Clingstone?" asked Perkasio. "A cheaper one would tell the time just as well."

"Quite true," replied Clingstone; "but it would not pawn for so much."

**HOT AIR AS A THERAPEUTIC AGENT.**—After calling attention to the early date at which hot-air treatment seems to have been found efficacious for some complaints, Wightman (*New York Medical Journal*, Aug. 17, 1901) sums up its advantages thus:

Dry heat is a valuable pain-reliever without any of the depressing effects common to drugs.

In connection with constitutional and medicinal treatment, it is a positive curative agent.

It is a stimulant to rapid repair and absorption.

It is one of the most valuable eliminative agents the physician possesses.

Where indicated, it possesses a sedative action on the nervous system obtainable by no other means.—*Therapeutic Gazette.*

**TRY MERCUROL.**—In answer to a correspondent who makes inquiry concerning the treatment of organic urethral stricture, the editor of the *Alkaloidal Clinic* (July, 1900) says; "A compound of mercury and nuclein, known as Mercuriol, has recently been introduced by Parke, Davis & Co. It would be well to try this locally, as a means of promoting absorption of the morbid deposits."

# HEAT CANNOT BURN

out the vitality of the  
Summer invalid fortified by

## GRAY'S Glycerine TONIC Comp.

It is the ideal hot weather remedy for  
physical depression, disturbed stomachs,  
malnutrition, nervous exhaustion and  
sufferers from chronic organic disease.

THE PURDUE FREDERICK CO.,  
No. 15 Murray Street, New York.



## MICAJAH'S MEDICATED UTERINE WAFERS

LEUCORRHOEA, ENDOMETRITIS, VAGINITIS, GONORRHOEA  
and all other diseases of an inflammatory character readily  
respond to its ANTISEPTIC, ASTRINGENT and ALTERATIVE Properties

No powder to spill. Nor water to soil the clothing.

Samples and Literature by mail Gratis

SIG: Insert one Micajah Wafer into the vaginal canal, up to the Uterus, every third  
night, preceded by copious injections of HOT water.

MICAJAH & CO.

Warren, Pa.

No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.

**THE BEST TONIC IN SUMMER AFTER FEVER.**—I have just recovered from a severe attack of pneumonia, which left me with a severe bronchial cough. I took Manola four times a day in tablespoonful doses, which has entirely cured the cough. I have been prescribing Manola for some time. Three months ago I cured a chronic case of asthma of six years' standing, which has not returned. Monola is the best reconstructive tonic I have ever used. Doctors prescribe it in all wasting diseases and after fevers of long standing. It is the winter remedy in coughs, and it is the best tonic in summer after fevers.

Respectfully,

Fox, I. T. G. L. CONNER, M. D.

**FAILURE TO REPORT CONTAGIOUS DISEASES.**—A case of interest has recently been decided in Greenfield, Mass., relative to the alleged failure on the part of a French physician of a neighboring town to report cases of contagious diseases. The evidence went to show that, in spite of ample opportunity and a general knowledge of the fact on the part of the community, cases of scarlet fever had gone for a considerable length of time unreported to the board of health. The presiding judge, in rendering his decision, said that, as an intelligent physician, the defendant must have known, after attending a case for nearly a week, that the disease was contagious and that he was, therefore, culpable. The physician in question was fined \$50. The case was appealed. —*Boston Med. and Surg. Jour.*

**HOW THE FIGHT STARTED.**—*Clancy* (telling his war experiences): "'Tis will Oi rimimber th' noight befor Manilly was took. Oi lay in a trinch wid har'dly a rag on me back, wit' t' th' shkin, when Oi hear-rd wan av our b'ys tillin' another thot we'd make sivil breaches in th' intrinchmints—"

*Dugan*:—"An' Oi suppose ye pulled on a pair av thim, an' was warmer afther thot?"

*Clancy*:—"A pair av phwat, mon?"

*Dugan*:—"Av th' breaches, av coorse."

**HEREDITY AND TWIN BIRTHS.**—A woman who gave birth to twins has the following family record: 1. Her paternal grandmother twice gave birth to twin children. 2. A grand aunt had two successive twin births. 3. A paternal German cousin gave birth to twins and, finally, the patient's father was one of twin children. On the mother's side, an aunt gave birth to triplets and died of uterine hemorrhage during this confinement. —*Progres Medical.*

## Smallpox and Vaccination.

By CLARENCE, R. VOGEL, M. D., St. Louis, Mo.

Vaccination, as practiced originally by the use of humanized virus, met with serious objections. Syphilis, erysipelas, and tuberculosis were undoubtedly transmitted from one person to another. These objections have, however, been done away with by the introduction of animal virus. The Aseptic Vaccine made by Messrs. Parke, Davis & Co., which has been tested both physiologically and bacteriologically, will give the best results.

To vaccinate properly, wash the surface with Castile soap and water, rinsing off with sterilized water. Scrape off the scarf skin and coat the abraded spot with the virus. Care should be taken that no blood be drawn.

**A GRIEVOUS OFFENSE.**—*Magistrate*: "The charge is interfering with an officer. Roundsman McCarty, you will please state exactly what the defendant did."

*Roundsman McCarty*:—"Oi wor passing his fruit-shtand, yer anner, an' Oi shwoiped a banana, whin th' dago troid t' tek it from me, yer anner."

**COFFEE JUNKET.**—Dissolve two teaspoonfuls of sugar in two tablespoonfuls of clear, strong coffee; mix this thoroughly with one-half pint of fresh, cool milk; put the mixture into a clean sauce-pan and heat it luke-warm (not over 100° F.); then add one teaspoonful of Fairchild's Essence of Pepsine and stir just enough to mix; divide quickly into small cups or glasses and let stand until firmly jellied, when the junket is ready for use; it may be placed on ice and taken cold; as a dessert may be served with whipped cream.

**ETHER COMPRESSES IN STRANGULATED HERNIA.**—George, in *Jour. des Pract.*, reports two cases of strangulated hernia in which he could produce no effects by taxis. He saturated compresses with ether and applied them to the parts and at the same time produced moderate taxis. After the compresses were kept in position for several hours reduction was accomplished without much difficulty. —*Amer. Med.*

## Both Require Skill.

There are two kinds of people

In this curious world's hodge-podge,  
If referring to bicycles—

Those who ride and those who dodge.

**Preparation—Par Excellence**

**“ Fellows’ ”**

**Syrup of Hypophosphites”**

CONTAINS

**Hypophosphites of**

**Iron,**

**Lime,**

**Quinine,**

**Manganese,**

**Strychnine,**

**Potash.**

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***SPECIAL NOTE.***—Fellows’ Hypophosphites is *Never sold in Bulk*, and is advertised only to the Medical Profession. Physicians are cautioned against worthless substitutes.

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**LITERATURE OF VALUE UPON APPLICATION.**

**No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.**

THE MORALS OF ANTI-VIVISECTIONISTS AND INCIDENTALLY OF SOME EDITORS are illustrated by a contributor to the editor of the *Atlantic Monthly*. In the current number the editor so far forgets his duty to literature and to ethics as to allow a foolish article to be published in the interests of the foolish antis. Both editor and contributor should have read Dr. Ernst's pamphlet (to which illusion is made elsewhere), before permitting the *Atlantic Monthly* to be used by antiscience for nefarious purposes. All such diatribes are based upon the repetition of lies, or of the reports of ancient experiments no longer allowed or advised. It would be just as pig-headed to argue that all religion is infamous because of the sins of some medieval religious persons, as to declare that all vivisection is cruel and useless because of the experiments of a Majendie. The logical and right thing for some antis to do would be to stop cruelty if it exists. Instead of that they are immorally silent about their own daily vivisections and cruelties to animals—they who are not vegetarians—and with malicious indiscrimination they charge others with motives and acts of which they are not guilty. Take the following excerpt from the article in the *Atlantic Monthly* as an example:

The same arguments which would lead us to vivisect the inferior dumb animal would lead us to vivisect also the inferior human animal. Why not vivisect the child as well as the dog? We take the life of a murderer; why not vivisect him? What right has he to be exempted from torture any more than an unoffending dumb animal, who is equally susceptible to pain? Besides, it is a fact, to which attention has often been called, that, in the interest of medical science, it would be much more profitable to dissect men alive than it is to dissect horses or dogs alive. In other words, it would "pay" better. The vivisection of dumb animals is defended on the ground that it "pays," and it is hard to see why the vivisectioning of criminals could not be defended on the same ground.

The illogicality and the immorality of this writer are in plain evidence. Every statement is either a lie or an error, or both. 1. The dog and child are not of the same value to the world. 2. The results of using them for experimental purposes would not be equally bad or equally good. 3. The profession has never desired nor asked for human vivisection, and has, as a whole, reprobated and repudiated it. 4. Such usage and logic may and does satisfy the reason and con-

science of the anti-vivisectionist, but not ours. 5. There is no "torture" in modern American vivisection experiments. If there is, the antivivisectionists should help us to stop it. All good physicians and experimenters will aid in this noble work. 6. The profession has never said and does not believe that "it pays"—in the sense Mr. Merwin puts into these words.—*American Medicine*.

#### Strange Epitaph in Floreton, in Marsh Churchyard.

Here lies the bones of Richard Lawton.  
Whose death, alas! was strangely brought on;  
Trying one day his corns to mow off,  
The razor slipped and cut his toe off.  
His toe, or rather what it grew to,  
An inflammation quickly flew to,  
Which took, alas! to mortifying,  
And was the cause of Richard's dying.  
—From Gloucestershire. (England), *Notes and Queries*.

Dr. Lewis S. McMurtry, surgeon in charge, The Jennie Cassiday Infirmary for Women, Louisville, Ky., writes:

"I would thank you to send me some Hypophosphites for use in this infirmary in the private department. Syr. Hypophos. Co. (Fellows') has long been a favorite preparation with me."

STILL HAS A COMPLAINT.—*Askit*:—Whatever became of that patient of yours you were telling me about last spring?

*Dr. Sokum*:—Oh, he's got a complaint now that's giving me a great deal of trouble.

*Askit*:—Indeed! What is it?

*Dr. Sokum*:—It's about the amount of my bill.—*Philadelphia Press*.

A CASE OF POISONING FROM HAIR DYE.—Dr. George Petit (*L'Independance Medicale*, 1901, No. 18) reported the case of a woman of 33 who, while confined to her bed after having injured her foot, had her hair cut short. Later, in Budapest, she bought a hair dye, which she used for three years. She grew thin and weak, and showed all the signs of dyspepsia. During the three years she had 16 successive attacks of erysipelas, for which no cause could be found. Petit finally came to the conclusion that the hair dye must be the cause of all these symptoms of systemic intoxication. Examination showed that it contained resorcin. Since she has stopped using the dye, she has grown gradually well. Oddly enough she had herself come to the conclusion that the hair dye was the cause of all her trouble, but tried to hide the fact from her physician.—*Philadelphia Med. Journal*.

# Journal of Medicine and Science.

ISSUED ON THE TENTH OF EACH MONTH.

In the Interests of Public Health, and in order that the People of Maine may reap the great Benefits, both hygienic and economic, assured by a judicious Application of the Principles of Preventive Medicine, this Journal supports the following Propositions and urges Physicians and Laymen to work diligently to further their Consummation.

- 1st. The Establishment of a Sanatorium for the Treatment of the Consumptive Poor.
- 2nd. The Abolishment of the Coroner System and the Appointment of Medical Examiners.
- 3rd. The daily Inspection of School Children by School Physicians.
- 4th. The more liberal Endowment of our Medical Schools by private Charity, and the voting of larger Appropriations to our State and Local Boards of Health.
- 5th. The Establishment of a State Bacteriologic Laboratory.

For, surely, health is the prime essential to success in life, and the health of the people is the foundation upon which all their happiness and all their power depends.

Vol. VIII.

PORTLAND, MAINE, SEPTEMBER, 1902.

No. 10.

## \*A Few Facts Concerning our Present Practical Knowledge of Certain Common Infectious Diseases —Notes on Modern Advancement.

By FRANKLIN STAPLES, M. D., Winona, Minn.



WHILE it may be justly claimed that great progress has been made of late years in all departments of medicine, it is evident that in no other has advancement been greater or more practical than in what pertains to the great department of infectious diseases. Various developments in the progress of science and art, and in the government of the country for sanitary protection, have conspired in promoting the higher advancement in this direction. Among the more important developments that have tended directly to the aid of such progress is that of modern medical bacteriology. What has come to light by means of this advancement has helped to a better understanding of the pathology of the various infectious diseases, and, in this way, to a more complete knowledge of the most effectual means of management as well as of prevention. For our present study, and by way of illustration, we may take a few of the more common diseases of this general class. The advantage gained by the study of common affections is likely to be of more practical value than of those the oc-

currence of which is less frequently observed in practice.

*Therapeutic Means and Methods:*—Before noticing any particular disease and its management, a word may be in order concerning an important modern advance in the management of infectious diseases in general, the character and meaning of which has been aptly expressed, in a word, as "Immunity and serum therapy." Immunity is the natural or acquired condition of tissues of the body which renders them incapable of receiving bacterial infection. Serum therapy is a term applied to a method of artificial production of immunity. Further explanation is this:—Certain pathogenic bacteria, when active in producing and carrying on their specific affections in the tissues of the animal body, secrete or produce a substance which, uniting with the fluids and other tissues, renders the same immune to further infection, and at the same time destroys the toxic germ;—the offspring versus the life of the parent. In this we have explanations not only of the cause of immunity, but of the self limitation of infectious disease. A tissue substance, the blood serum of an animal artificially rendered immune to a specific infection, is an antitoxin, and has a twofold use in practice, viz., first, to aid in destroying the causative element, when introduced during the progress of disease, thereby shortening its course, and rendering fatality less liable; and, second

\*Read before the Southern Minnesota Medical Association at the annual meeting held at Owatonna, Minn., August 7, 1902.

when introduced before infection or before the development of disease, by producing immunity, it may prevent such development, and render any infection, for a time at least, impossible.

A brief mention of certain essential characteristics of a few common infectious diseases, as they are now known, may serve to show something of the character of modern practical advancements in the knowledge especially of diseases of this class. We have the following: Diphtheria, Pneumonia, Tuberculosis, Enteric Fever, and Variola.

*Diphtheria*.—This disease, while more common among young people, is not limited to any age or confined to any locality. Its large mortality has been materially reduced of late years, largely because of advanced knowledge of its pathology and the consequent improved ways and means of management. It is known that the antitoxin treatment of diphtheria has been exceptionally successful, as well as that of rendering the body immune to the affection before an attack. The question as to whether the disease is primarily a local or a general affection has been decided for the former, and that its first introduction is by direct infection from without. This, with a knowledge of the character of the infection, has determined concerning the necessary isolation and disinfection. It is not as volatile as some others, and is more likely to be retained on persons and clothing than to be held by and transmitted for any distance through the air. Absolute cleanliness of persons and of material surroundings is required. Dry air and sunlight is antagonistic to the disease germ. Treatment, both local and general, to be effective, must be antiseptic and supporting. Cleanliness everywhere, antiseptics applied directly and frequently to local disease, and nutrients, tonics, and stimulants for general support. The specific bacillus of diphtheria was discovered in 1883, and later the specific antitoxin by cultures of the attenuated germ. This antitoxin, introduced hyperdermically, tends to aid and hasten the natural process of destroying the pathogenic germ, and helps to secure the immunity. The greater advantage is gained when immunity is secured and made a complete protection before infection has been received. This is a good example of the use of antitoxin serum therapy in the cure and prevention of infectious diseases. Vital statistics, carefully obtained and reported from different states of the country, have shown less prevalence and a diminished fatality of and from this disease

since these means and methods of management have come into general use.

*Croupous Pneumonia*.—The prevalence of pneumonia and the resulting mortality have largely commanded the attention of the medical profession of late. At the late annual meeting of the American Medical Association at Saratoga, N. Y., the subject was considered in different sections, and the following facts, with others, were made to appear: first, that while the mortality from most if not all other infectious diseases has been materially lessened in late years, that from pneumonia has largely increased; that while tuberculosis, for instance, has dropped to the fourth place in its death rate, pneumonia has advanced to the second place among the principal death producing diseases; and, second, that this increased rate was especially in large and densely populated cities. This would indicate that this extra mortality is one of the many evils resulting from crowding population into the unhealthy parts of great cities, these parts, as it is known, being largely rendered such by this very over crowding of inhabitants.

In considering causes of the increased mortality from pneumonia, it is certainly not in any sense true that, among the medical profession in general, means and methods of management of the disease have degenerated. The reverse is known to be true, and this in no small degree. It was since the middle of the last century that depletion by venesection, and the use of sedative remedies, tartar emetic, veratrum viride and the like, were important essentials in the authorized treatment of pneumonia in its different grades and stages. The change from this method, which in time became quite complete, was from the depleting to the supporting and stimulating plan; and remedial agents, quinine, digitalis, valerian, senega, ammonia, and for emergencies alcoholic stimulants, came into place. These and other remedies of their kind, in helping to support nerve energy, and in aiding general and local circulation, tend to produce such effect upon the vitality of tissues as to enable them more successfully to resist disease action and determine the victory of contest for the defense.

A more complete understanding of the reasons for the good effects of supporting treatment for pneumonia and other infectious disease has come to pass since the discovery of the specific microbe of the disease. The micrococcus or bacillus, as different scientists would have it, of croupous pneumonia was discovered about the year 1880. Much good experimental work has been done in the study



of this disease germ, and various results of practical importance have been obtained. Its part in the etiology of pneumonia has been a matter of question, some believing it to be the principal causative element in the disease, and others that it is merely a product or exists as a concomitant of the pathological action in the disease. The leading opinion now holds to the former view. A peculiarity is that the germ is found to be wholly or principally nonpathogenic in all parts of the human body except in the lung tissues. Its antitoxin, to be effective, must be introduced directly into the substance of the lungs. Of its practical utility in the treatment of the disease, a good authority, Goldsborough, of Maryland, writes as follows: "I feel so confident of the curative effect of the serum administered early and in large doses, that, for myself at least, I should feel culpable to a great degree, had I a case of pneumonia and failed to use the serum. In all cases I report there was a marked change within eight hours of administration, and in many there was a crisis successfully passed within forty-eight hours." The writer alludes to the fact that the antitoxin serum in no way interferes with other remedies that may be used, and that there can be no legitimate excuse for not using it.

Time limit now requires that what may be said of other diseases in this connection must be very brief—limited to one or two essential points for each.

*Of Tuberculosis:*—The great importance of this disease, because of the extent of its prevalence in man and in the lower animal, its many points of attack in the animal tissues, and its history of fatality, has led to great and continued efforts on the part of the best minds to discover and bring into practical use efficient means of prevention and cure. Investigation and practical work have been directed in two principal ways, viz., to means pertaining to hygiene and to therapeutics. In the former, the matter of locality for residence, with reference to climate, temperature, elevation, character of air, sunlight, etc., have been prominent. In the latter, both in medicines and in articles of food, such as have been found to afford the best aid to nutrition and tissue vitality have been brought into use and their values determined. In all, the worthy object has been to improve the qualities of tissues, the solids and fluids of the body, and thereby enable them better to resist the action of the specific disease germs, and aid in their destruction. For the latter purpose especially, certain germicide remedies have been used with those in

aid of nutrition; for instance, creosote with the cod liver oil, malt, hypophosphites, etc.

For a specific germicide and immunity-producing treatment of tuberculosis, we are to have but a word as follows: Continued and varied studies and experimental works have been and are being done by many able bacteriologists, and at times it has been thought that an efficient antitoxin for the tubercle bacillus had been discovered; but such has not been verified. The tissues of various subjects are less susceptible to the disease than those of the feeble, but immunity by artificial means has not yet been secured. Tuberculin, a product obtained by cultures from the toxic germ, is now used as a means of diagnosis of the disease, especially in animals. Study and advanced work, it is believed, will bring to the world the advantages of a treatment and a means of prevention of tuberculosis that have been matters of hope and expectation. Such an advance would be a great addition to present knowledge and valuable practical means already in use.

*Typhoid (Enteric) Fever:*—For this infectious disease, only a word concerning practical means of cure and prevention. The specific germ of the disease is found to do its work largely on and in the intestinal mucous membrane and glands, is passed in the dejecta and finds its way into drinking water, milk, or other articles of food, or is lodged on clothing. In this way and by these means the infection is communicated to the alimentary canal of a person, who suffers therefrom if susceptible to the disease. The nature of the disease and the ordinary method of transmission are generally understood, and cleanliness of person and surroundings, the destruction of infected excreta, and the disinfection of material in use, are the essentials of preventive management. Rational treatment of the disease consists in general support by suitable nutrition, and suitable disinfective medicines that will not only find and destroy disease germs on the surfaces of membranes and glands, but for this purpose will enter the tissues. Special serum therapy is now available.

*Smallpox:*—The established method of procuring immunity to this disease by vaccination,—the milder germ, in the form of an antitoxin, for the more severe and destructive,—has stood as a beacon light for nearly a century and a half in the highway of progress in preventive medicine. Modern discoveries in the science of bacteriology, and the practical advances in medicine made thereby, have served to make plain the meaning of what was dimly seen in part through outward ef-

fects. The eighteenth century vaccination of Jenner is seen to be the earnest of modern serum therapy and infectious disease immunity.

#### \*A Case of *Bothriocephalus Latus*.

By C. E. D. Lord, M. D., Assistant Surgeon, M. H. S.

#### *Gentlemen of the South Texas Medical Society:*

**I** PRESENT the following case to you as one of especial interest at this time, because of the rarity with which this parasite has been found in this country, even in imported cases; and because, in my own mind I feel sure that in the case about to be presented to you, infection took place in the United States from fish that had been imported from an infected locality.

*History:*—F. C. aged 26, native of Aland, Finland, had lived in his native town for 20 years; moved to Stockholm, where he remained for the next one and a half years, when he went to Denmark and sailed on Danish boats hailing from Copenhagen for the next two and a half years before coming to this country in August, 1900.

While in Denmark and Sweden, he followed his vocation of sailor, and upon arrival here he continued his work, first as longshoreman in Brooklyn and New York, then upon a scow in New York harbor, and finally, in November, 1901, shipped with the Mallory S. S. Co., running a line to Galveston, Texas.

Previous to coming to the United States he had had no symptoms of any trouble, but when he had been here ten months his bowels began to bother him and his appetite became, to use his own words, "that of two men."

This trouble with his bowels continued until July, 1901, off and on, but during this month, after a severe attack of diarrhoea, lasting a week, he noticed a piece of tapeworm about six feet in length in one of his stools.

He had at the same time an attack of what he called malaria, but which, from later developments, I think was only one of the manifestations of the ænemia which he soon developed.

In September, 1901, in another attack of diarrhoea, he passed five feet more of a worm; in October, two feet, and in November, three feet more. In each case, a persistent diarrhoea of from seven to ten days' duration preceded the passage of the links of the worm, and the pain in the epigastrium, which had accom-

panied each attack, was attributed to the diarrhoea.

He had spells of weakness and vertigo and vomited at times, but ordinarily his appetite was inordinate, and he continued to perform his work without intermission.

In January, 1902, he came to the outpatient office of the Marine Hospital Service, at Galveston, Texas, complaining of the diarrhoea, and gave me the history just quoted. Physical examination revealed the following:

Facies, that of a person suffering from ænemia; lips pale and bloodless, as was also the mucous membrane of the mouth; cheeks sallow, with a faint blush over the malar prominences; sclera bluish, and general condition of patient, aside from the noted ænemic pallor, good: there was no marked loss of weight from that which he claimed as normal.

Mensuration, negative.

Palpation, negative.

Percussion, negative.

Auscultation revealed a fine blowing murmur over the base of the heart, transmitted into the arteries of the neck, but not elsewhere.

There was no temperature, and upon patient's refusal to go to the hospital I instituted regular treatment, based upon the supposition that he harbored one of the two regulation tapeworms, and gave him explicit directions as to diet and method of catching dejecta.

At 11 o'clock the next day, I found him waiting for me at the office with an expansive smile on his face, and a large tomato can in his arms, which contained a tangled mass of worms, measuring in all fifty-one (51) feet.

Parts of four distinct worms, in pieces as follows, were found:

- 1.—Fifteen feet, head, neck and body.
- 2.—Thirteen and a half feet, head, neck, and body.
- 3.—Seven feet, neck and body.
- 4.—Five and a half feet, neck and body.
- 5.—Ten feet of mature body segments, which from appearance came from either No. 1 or No. 2.

If we but add this ten feet to either of those pieces, we get quite a respectable tapeworm, viz., one either twenty-five feet, or one twenty-three and a half feet in length.

Microscopic examination of the segments showed the "lidded ova" and "rosette uterus" of *Bothriocephalus Latus*. But as the patient sailed for New York at noon the very day he brought the specimens to me, and had slipped out of the office while the examination of the parasite was going on, I had to await his return in three weeks before

\*Paper read at the June meeting of the South Texas Medical Society.

making the blood examination and completing my history.

Upon his return I found 50% Hæmaglobin and 3,640,000 reds.

There were no nucleated red corpuscles, but the usual forms of poikilocytes abounded. Patient returned for another examination on February 20th, and I found 80% Hæmaglobin, with a red count of 4,400,000.

No change worthy of note was discovered in a hurried examination of a stained specimen for the Whites.

There had been no return of the parasites during the six weeks that had now elapsed since their removal, as the patient assured me that he had kept a close lookout for any signs, and I believe that I obtained, in full, four complete worms, although I was able to find but two heads in the mass brought to me in the tomato can.

When the difficulty in detecting such minute structures as the heads of tapeworms is considered, and the fact that I was able to find the two which I obtained only upon straining the fluid left in the can through gauze, one can readily see how the other heads could have been overlooked in transferring the dejecta to the receptacle in which he brought them to me.

I had hoped to get other examinations as the ship returned periodically to Galveston, but, like all sailors, this one liked variety and left the ship in March; at least I have been unable to reach him since February 20th, 1902.

However, I feel safe in believing that he recovered his health perfectly during the month of March.

Before stating the facts which led me to the conclusion that infection in above cited case was acquired after residence for some time in this country, it will be necessary to review briefly what is known regarding the life history of the parasite in question.

That the *Bothriocephalus Latus* is distinct from *Tænia Solium* and *Tænia Saginata* was recognized by Glaser, as early as 1603; Linneus describes it as *Tænia Vulgaris* and *Tænia Lata*; its anatomy was worked out by Sommerand Landois in 1872, but to Max Braun is due the honor of having thrown the first light on its mode of development, in his papers published in 1882-1883, and later in 1894.

According to Braun, the lidded ova escape to water; undergo a process of fission requiring months and become ciliated, spherical embryo. The ciliated envelope is soon shed and the embryo is ingested by some fish into

whose muscles it migrates and becomes the "measle" or "plerocercoid".

The embryos, *plerocercoides* or *larvæ* have been found in the muscles, sexual glands, liver, spleen and intestines of the Pike, Turbot, Perch, Brook Trout and Lake Trout, and in other fishes not called by name.

Experiments on cats and dogs, after feeding them on measly fish, have shown that mature worms develop in these animals, and that hence the cat and dog in infected districts may become a source of infection to man.

In 1882-1883, three students offered themselves for experimental purposes and ate measly fish or those in which *plerocercoids* had been demonstrated. At the end of four to six weeks, numerous ova were found in their dejecta, and mature worms ten to twelve feet in length were evacuated after treatment. (Braun.)

Other authorities state that the *Onchosphæra* develops first in some unknown host until it becomes the *plerocercoid* or *measle*, and at this stage seeks as a second mediate host one of the fish just mentioned. The period of time which must elapse before the ovum turns into the *plerocercoid* has not yet been definitely determined, except that the time is stated as months.

Braun's investigations seem to prove beyond doubt that it requires only four to six weeks for a mature worm to develop from the measle, and it is to this fact that I wish to call attention later in the paper.

As to the geographical distribution, it may be stated that this parasite is found principally in the great lake regions of Switzerland, the Russian Baltic Provinces, Southern Scandinavia, Upper Italy, Southern Germany and East Prussia, Belgium and Holland.

It is the commonest tapeworm in Japan, and has been found so often in Ireland as to be known as the "Irish Tapeworm."

Considering the frequency with which this parasite is found abroad, and, remembering the fact that the United States is drawing thousands of immigrants annually from infected localities, it is rather remarkable to my mind that so few cases of *Bothriocephalus Latus* have been reported in the literature of this country.

Dr. Stiles, in Sajou's Annual and Analytical Cyclopædia of Practical Medicine, revised edition, states that but three cases were known to him personally as late as October, 1897, and from some correspondence I learn that not more than four or five cases have been reported to date.

This may be due to the fact that so little

attention is paid by the average practitioner to the accurate classification of parasites obtained by treatment. In the majority of cases, he places the tapeworm which has yielded to his efforts under the head of either *Tænia Saginata* or *Tænia Solium* and thinks no more about it.

To differentiate between beef, pork and fish tapeworms, one must note the size and shape of the head and whether the head is armed or not, the size and shape of the mature segments, the arrangement of the uterus, and, most important of all, the appearance of the ova under the microscope. In fact, the microscope is indispensable to the accurate diagnosis of intestinal parasites of all kinds, and often gives the first clue to some obscure ailment that has defied all the skill of the physician.

Especially is this true in this part of the country which should abound in such diseases.

I will spend a minute in dealing with the commoner points of difference between the three *Tæniæ*.

The beef worm, *Tænia Saginata* or *Tænia Mediocanellata*, is the most common tapeworm on this continent, and probably 85% of all cases treated are of this variety. Its characteristics are so well known to you all that there is no need of reviewing them, and the same thing might be said of the pork worm, *Tænia Solium*, but when we come to the *Bothriocephalus Latus* we note at once distinct differences, which serve to render a diagnosis easy.

First of all, this worm is the longest of human parasites; its oldest segments are at once the broadest, and at the same time the shortest; its uterus shows as a centric, sometimes excentric dark mass, and the ova are oval, brown and have a distinct lid at one end, while the ova of both *Tænia Solium* and *Tænia Saginata* are nearly round and possess a distinctly striated capsule.

In the two commoner varieties, the uterus consists of a medium stem with lateral branches, *Tænia Solium* having seven to ten on each side, while *Tænia Saginata* has from fifteen to thirty-five.

In both these worms the genital opening is on one lateral margin, while in the fish worm it is placed in the centre of the segment, anterior and between the two dark masses which give the rosette shape to the uterus.

If the head be placed under a low magnifying glass a diagnosis is quickly made, for the *Bothriocephalus* possesses a narrow, rather oval head, having two narrow grooves running with the long diameter, while the pork worm has a row of hooklets in addition to sucking

disks, and the beef worm has only disks, while its head is blunt and pigmented.

So much for diagnosis.

Let me now review the history in the case presented and call attention to the facts upon which I base the opinion that infection took place in this country.

1.—Patient claimed normal health until May, 1901, or until he had been ten months in the United States. If you will recall Braun's experiment with human ingestion of measly fish, you will remember that it took only from four to six weeks for the measles to mature and grow to a twelve-foot *Bothriocephalus*.

As the patient passed the first noted piece of worm in July, 1901, and had the first attack of diarrhoea in May, 1901, we can hardly do otherwise than to suppose that he became infected perhaps as early as April, 1901.

This liberal estimate leaves a clear space of over eight months since he left Denmark, his last residence before coming to this country.

2.—Patient had never left this country since his first arrival, but had regularly eaten of imported "Stock Fish," which is a specially prepared Norwegian Cod.

As the larvæ of the parasite under discussion is known to infest various fish of the Scandinavian Peninsular, it is to this imported commodity that I am inclined to trace the infection in this case.

In closing, I wish to predict that sooner or later the *Bothriocephalus Latus* will become as common as *Tænia Saginata*, and far more common than the *Tænia Solium*, owing to the systematic examination of pork.

My reasons for this statement are as follows.

Our great lakes abound in Pike, Perch and Trout, while Brook Trout are abundant in most of the streams in the lake regions. Larvæ of the *Bothriocephalus* have been found most often in these fish.

Among the thousands of immigrants which we receive annually, at least 50% come from districts where this parasite is endemic.

The Finns and Scandinavians migrate almost at once to the great Northwest, and it is too much to ask one to believe that none of these people, coming from localities where this worm is endemic, are infected with the parasite.

The Finns are especially careless in their personal habits, and I feel sure that within a few years many cases of infection with this now rare tapeworm will be reported from that region.

It may even be that certain of the cases

of so-called chlorosis in young Irish immigrant girls coming from the lake regions of Ireland, where the *Bothriocephalus* is endemic, will prove to be nothing more than the recognized anæmia due to this worm.

In the case cited, the only marked objective symptom was the anæmia, and reasoning from this as a foundation it will be interesting to watch for a like solution to many of these cases of anæmia in immigrants.

### Criticisms on Christian Science.

By E. H. JUDKINS, LL. B., M. D.

**A**LFRED FARLOW, Esq., as I understand, attends to various articles in which attacks are made on Mrs. Mary Baker Glover Eddy, and the "Eddyism" or alleged "Christian Science" which her deluded followers suppose she originated. His answers, so far as I have seen them, are vague and vacillating, and in no way does he discuss the subject at issue, but rather enters a general denial without apparent reason.

If he now tells us the truth, as printed in the *JOURNAL* for June, that his cult "does not aim to practice medicine or take its place," he must admit that his beloved "Christian Science" is being, "at this late day," brought a little more to a common sense basis—although the two, heretofore, have been diametrically opposed to each other. He has, in reply to another article of mine, said that "the basic lesson of this science is scriptural," but failed to produce the proof, just as he neglected to furnish the facts in reply to my recent challenge for him to show that "Christian Scientists not only succeed in healing contagious diseases, but they also successfully destroy contagion itself as he claimed." I renew the challenge now.

As a matter of fact—if a "Christian Scientist" could get near enough to any matter (except money) to consider a fact—does not Mr. Farlow know that there have been criminal failures in various attempts made by Christian Scientists to attend contagious diseases? One of the leading medical journals of Philadelphia, has brought to the notice of the profession many such cases of criminal neglect on the part of these "Christian" healers. In that city, two—malpractitioners probably—of this cult were recently held by the coroner for causing the death of an infant. The journal adds:

"We trust the court will demonstrate to the public that in this country the liberty to kill children is not a part of the liberty to worship God."

Two female "Christian" Scientists in Milwaukee, Wis., were indicted for practicing medicine without a license. A fatal case of diphtheria was the cause. They were convicted and fined. In Victoria, B. C., a child died from laryngeal diphtheria, lately; and the jury stated that the "Christian Scientists" who maltreated the little boy "did unlawfully kill and slay the said child."

Here are three cases of murder, and many more could be cited, in proof of a former statement that "hundreds of children have been allowed to die without the slightest (rational) effort to alleviate their sufferings" by "Christian" Scientists. Mr. Farlow denies this, but cannot disprove facts by false assertions.

In Peterboro, Ont., a death occurred recently from typhoid fever under treatment by these people, and the coroner's jury expressed their opinion that "for the safety of society further legislation is necessary."

Now, then, will Alfred Farlow, Esq., as a layman—not as a lawyer for his client, and a fanatic in his cause—and an honest man, answer the questions:

1st. If "Christian Scientists" do not aim to practice medicine, why do they try to treat diseases that doctors of medicine, only, are competent to treat under the laws of the state in which they live?

2nd. Why do Christian Scientists appear before committees in various states in opposition to bills regulating the practice of medicine, if they are not aiming to practice it?

3rd. If, as he claims, "Christian Scientists do not aim to practice medicine," why are they continually and constantly meddling and mixing with the same, and thus making mischief in contagious and other diseases properly belonging to its province?

Of course they do not use medicine, and sanitary science, as well as physiology, is to them as non-existent. A prominent member of the sect said at a legislative hearing: "We do not believe in infectious diseases, and a person, if a Christian Scientist, could not contract such diseases." They could not catch smallpox or have scurvy! And yet these people haven't any use for hygienic principles, and the only "principle" they do recognize they try to call "God."

This same gentleman said he could bring patients with the smallpox into a room with other persons, or send children to school with scarlet fever, for they had no disease; not-

withstanding he diagnosed tonsillitis from diphtheria "through the power of Almighty God," which he presumed to have on tap! A lady lunatic of this same company of "Christian Scientists" said that if 500 of them were in one community there would be no disease and "no need of a health department"—or a graveyard!

But, as Dr. W. H. Thomson, of New York, asks: "Suppose a man finds his next-door neighbor regarding a case of smallpox, scarlatina, or of diphtheria, in his house as only ideas, and for getting rid of these ideas calls in a Christian Scientist to deal with them by his or her ideas, what then?" Suppose his "Christian Science" neighbor does not even do that, but pays a fee to some "scientist" to operate through "absent treatment"—as they would try to do in contagious cases—what then? Would not such a childish delusion be more dangerous than allowing children to play with fire? How many hundreds of innocent persons might thus be fatally stricken if "Christian Scientists" could only carry out their theories! Would not this whole system of doctrine in that aspect become simply criminal in its crudity as well as credulity, and opposed to all civilized or really Christian practice?

Casson has written a book on "The Crime of Credulity." In his preface the author of this book says:

"Just as there is in every human being a vermiform appendix—a useless and dangerous remnant carried up from some lower stage of existence, so there are in our immature civilization similar survivals of medievalism and barbarism. These appendices may remain harmless and unnoticed for years, but they may at any time cause intense pain and possibly death. Neither the physical nor the social body are (*sic*) safe as long as these tag-ends are allowed to exist in it, and it is with the desire to prevent a threatened attack of national appendicitis that this book has been written."

The symptoms of this national malady are all sorts of crude beliefs and opinions that are now rampant in this country.

This mis-called "Christian Science" is a crudity, supported by credulity. It is a relic of paganism, combined with the modern mental views of Quimby and Evans, cunningly concocted by the priestess of the cult—the crafty "Holy Mother," the "false prophetess" whom they worship—to dupe and deceive otherwise worthy people. It is not Christian; it is not science, and Alfred Farlow or any other fellow, even the "female woman," the "father and mother god" of the sect, cannot produce *one* scientific statement in all the jumbled creed to warrant the oft-repeated claim that it is a "science," as Far-

low three times states it is in the June issue of this JOURNAL.

It is a pseudo science, and its practitioners are pseudo scientists—this much can be proved and cannot be disproved. It is not for me to judge who are or are not Christian; but, as I understand it, no one of these pseudo scientists uses scientific methods which any known science recognizes, nor do they treat people by Bible methods of "Divine Healing," which alone could honestly be called "Christian."

"Christian Science" is but an "ism," in my opinion, Alfred Farlow to the contrary notwithstanding; its followers are "Eddyites," properly called the same as we speak of "Dowieites," or even "Simpsonites," each named from their chief promoter.

An article in the *Christian Advocate* classifies all these fakes and frauds together, and states that "these combinations of fanaticism are rolling up a very large list of agonizing and unnecessary deaths," and demonstrates that "argument and experience have little effect on victims of this form of superstition." "There is little use," it says, in trying to open their eyes. For in science, religion and finance, when a person adopts a principle which contradicts reason, philosophy, and the laws of nature, and then distorts every passage of scripture to make it agree with his irrational theory, he can believe anything."

The writer is willing that they should believe the moon is "made of green cheese," but when they ask him to take a slice and say it is fine food, he cannot accept the offer any more than Alfred Farlow can the various challenges of really Christian and scientific men to prove what he is so slyly and constantly watching the newspapers to claim, in order to delude the ignorant, or catch the unwary among those not illiterate. For, in the first place, the writer would not allow Alfred Farlow or any other fellow to try to crowd theories he actually is aware to be false down his throat, without a single fact of scientific or Christian statement to support them, which fact or facts I again challenge him to produce.

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Robert T. Morris anchors a floating kidney by stripping off the fibrous capsule over a large portion of the surface of the kidney, and then fastening this flap in a slit in the psoas muscle. Sometimes the quadratus lumborum is a more available muscle than the psoas for this operation.



## Therapeutic Suggestions.

Dr. Stoddart considers liquid air the best means of freezing in the laboratory, possessing many advantages over other methods.

Dr. Bevans, in a recent paper read before the American Surgical Association, gives a very encouraging outlook for the treatment of all forms of cancer by the X-rays. Many cases are cited, showing by microscopic examinations the results of the treatment at different stages. He urges that every hospital should train an expert for X-ray work. That it must be acknowledged that burns occur even in the practice of experts. That every case of operation for cancer should be exposed to the X-ray for six weeks. That the investigation of the effect of the X-ray upon pathologic conditions is the most important question now before the profession.

Several physicians report excellent results in treating asthma with injections of nitrate of silver, according to the plan of Dr. Thomas J. Mays. Dr. H. S. Bass, of Tarboro, N. C., recently reports five cases, of which three were greatly relieved by this treatment. One to five drops of a 2½ per cent. solution of silver nitrate is injected with a hypodermic syringe under the skin of the neck over the vagus nerve, a little to the outer side of the carotid artery, about midway between the angle of the jaw and the clavicle.

V. Chlumsky, commenting on the very unsatisfactory results following attempts to break up bony ankylosis, says: Ankylosis is due to involvement either of the soft parts or of the bone, but is most commonly due to a combination of both these factors. The stiffening due to the soft parts may be remedied by passive motion and massage, but osseous ankylosis requires such violent force to induce motion that hemorrhagic exudation will surely occur, necessitating rest, with a consequent recurrence of ankylosis.

Taking the idea from non-union of bone when a muscle or fascia has been interposed between the ends of broken bones, Chlumsky has experimented on dogs and rabbits, interposing plates of celluloid, silver, tin, rubber, etc., after resection of a joint. The joints were opened at periods varying from several weeks to four and one-half months after the introduction of the foreign body. They showed an attempt at normal joint formation—the surfaces smooth, coated with a thin lamina of cartilage, and bathed with serous fluid, and the periarticular surfaces thickened.

Rubber and celluloid plates remained undisturbed, but the tin and silver had

been absorbed. Because non-absorbable substances so frequently give rise to unpleasant sequels after operation, Chlumsky suggests that decalcified bone, ivory or magnesia plates be tried.

Dr. F. G. Balch, in a recent paper on the treatment of gonorrhea, seems to place his faith on three drugs—nitrate of silver, permanganate of potassium, and protargol.

Dr. Chas. E. Woodruff is a strong advocate of the value of hot salt water solutions in the treatment of urethritis.

He irrigates every hour, at first, with a quart of salt solution used as hot as can be borne.

Of 98 cases thus treated in 5 per cent., all symptoms disappeared in two days; in 30 per cent., in seven days; in 80 per cent., in eleven days; in 20 per cent., in 17 days; in 10 per cent., in 20 days, and 10 per cent. were cured in three weeks. After the discharge has stopped, an astringent solution is used for two or three weeks.

König divides the sequels of gonorrhea into three classes: local, such as stricture; ascending, such as ovaritis, orchitis, cystitis, pyonephrosis, etc., and the blood infections, due to absorption of the gonotoxin, such as pyæmia affections of the heart, pleura, and joints.

All recent writers upon this subject urge the need of more general information by the laity upon these subjects, and that laymen should be warned against the ravages, both near and remote, of venereal diseases.

M. Gayet and M. Bounet, in a recent paper, have summarized what we know of osteomalacia as follows: "1. Osteomalacia is a trouble of nutrition of the bones, consisting in a deficiency of lime salts and leading to softening of the skeleton. This trouble may be local or general. 2. Local osteomalacia is observed to follow traumatism, osseous infections, and also certain nervous diseases. 3. The anatomical lesions are similar in the local and the general forms. They are not uniform, but present varieties which are not in any relation with the seeming etiology, the clinical variety or the degree of generalization of the disease. 4. The pathogenesis has no specific character. 5. There are predisposing causes evident, related to age, sex, climate, etc. 6. The determining causes remain obscure, but the totality of facts seems to assign the most important place to troubles of the nervous system. 7. A plausible explanation of the satisfactory effects of castration is found in



the fact that the internal secretion of the ovaries results in increased activity of the elimination of phosphates."

So that, as Curato and Tarulli have shown after removal of the ovaries, there is a decreased oxidation of the compounds of phosphorus, and an increased deposit of calcium and magnesium phosphate in the bones.

Dieulafoy says that, almost without exception, abscess of the cerebellum is the result of otitis media. The most reliable symptoms of this condition are occipital headache, vertigo, staggering gait, vomiting, nystagmus, optic neuritis, contraction of the cervical muscles, muscular asthenia, and a condition of somnolence bordering on coma.

Dr. S. H. Weeks, of Portland, reports in *American Medicine* a case of fracture of the fourth and fifth cervical vertebræ, caused by a fall from a ladder. Motion was lost in the left arm, but sensation was normal. Motion was good in the right arm and lower extremities, but the patient could not pass urine. Two days after the injury the laminæ of the fourth and fifth cervical vertebræ were removed, and great improvement followed the operation.

Orville Horwitz, in a discussion on hydrocele, says there are five different methods commonly used for the radical cure:

1. Acupuncture (for infantile hydrocele).
  2. Tapping and injection of some irritating fluid (iodin or carbolic acid).
  3. Antiseptic incision.
  4. Partial excision of the sac.
  5. Inversion of the sac.
- Of these methods he prefers the two last, though he acknowledges that partial excision takes time, is liable to be accompanied by troublesome bleeding, and there is danger of recurrence.

Dr. Senn, after relating his experience in examining recruits for the Spanish war, advises his students that there is too much operating for varicocele. He says that surgical intervention should be restricted to exceptional cases in which well marked symptoms are present, independent of the nervous phenomena induced by quack literature.

Horwitz reports 161 operations for the relief of enlarged prostate, and comes to the following general conclusions: 1. Success following the Bottini operation depends on having perfect instruments, a good battery, the necessary skill, and the employment of a proper technique. 2. In suitable cases the Bottini is the safest and best radical operation thus far advised for the relief of prostatic hypertrophy.

In these conclusions he seems to be upheld by several other surgeons, notably Bangs, Meyer, Alexander and Frendenberg. Many other surgeons, however, favor castration or even prostatectomy.

From the investigations and experience of a large number of obstetricians, it seems to be established that the one thing to do in eclampsia is to inject a large amount of saline solution into the rectum.

Dr. Reuben Peterson, after exhaustive research and many experiments on animals, concludes that when ureterointestinal anastomosis must be undertaken, that implanting of the vesical flap with its ureteral orifices should be insisted upon, because subsequent ascending renal infection is much less likely to occur.

There seems to be a growing tendency among investigators to refer the cause of gallstone and calculi to bacterial influence.

In post-operative anuria, the best remedy is infusion of warm salt solution into a vein.

**TWO CASES OF GERSUNY'S SUBCUTANEOUS PARAFFIN AND VASELIN INJECTIONS IN PROSTHESES OF THE NOSE.**—A mixture of sterilized paraffin and vaselin was injected by Hamilton (*Australasian Medical Gazette*, Oct. 21, 1901) in the nose of a girl of sixteen, the bridge of which was very much sunken, presenting the usual appearance of "saddle-back" nose of inherited syphilis, due to the disease affecting the lateral arches. The whole of the septum was ulcerated away, and there was nothing left but the columna to support the tip. The nose, after the injection of about one and a half fluidrachms, entirely recovered a normal appearance. The same excellent results were obtained in another girl of the same age that had been born with a sunken bridge.

Hamilton points out that two years have elapsed since Gersuny made his first experiments, thus demonstrating that the prostheses can be considered permanent.—*Therapeutic Gazette*.

**SPASMODIC CROUP.**—The bichromate of potash is of marked value in pharyngeal irritations, and will be found eminently satisfactory in spasmodic croup. Many times the efficiency of this drug will be increased by combining with it apomorphia. One-tenth of a grain of each placed in two ounces of hot water, and a teaspoonful of the hot solution administered every fifteen minutes, will produce decidedly beneficial results after a few doses.—*Ex.*

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PORTLAND, MAINE, SEPTEMBER, 1902.

## Editorial.

### Medical Instruction.

The teacher in the medical school, like the teacher in every other school, will, in the near future, make the art of teaching his life work, and will devote his whole time to this occupation. The time has gone by when the curriculum of a medical school can be arranged to suit the convenience of the teachers rather than the needs of the students. The medical teacher of the future will be as much a part of the university as are the professors in the academic department. He will receive an adequate salary and will engage in no other business. The teachers in our medical schools are very excellent gentlemen and very skillful physicians, but most of them have about as much faculty for teaching as M. Jourdain did for writing poetry. So long as the sole requirement of the medical teacher was the delivery of a course of didactic lectures, the status of medical teaching was on a corresponding low grade, and the results accomplished were entirely inadequate to fit students to prevent and cure disease.

In the past few years the medical schools nolo volo have been obliged to appear to keep step in the march of medical progress. Largely through the urging of the national, state and local medical societies, the pre-

liminary standard required of the student has been raised, and the course has been lengthened until there is now sufficient time devoted to medical education so that the schools are now able to turn out trained and educated physicians.

Of course, all these added requirements on the part of the student are but a pretense at a higher education, so long as the teachers do not devote their whole time to the work, or do not bring sufficient enthusiasm and teaching ability to the calling. It is the height of absurdity to attempt to make mere quantity in medical studies take the place of quality in medical instruction. The medical school of the future will succeed in combining quantity and quality in its teaching.

### Common Sense Opinion.

The Hon. Abram S. Hewitt, of New York, has long been a large employer of labor, and he has, both by his conduct and his talk, proved himself to be a real friend of the laboring man. In a recent interview, published in the *New York Times*, Mr. Hewitt says:

"Neither party has the right to coerce the other into submission, except through the action of the courts or tribunals duly constituted to hear and decide upon causes of action submitted to them by either or both parties.

"The right of workmen to refrain from labor,

and the rights of the employer to cease to employ, are correlative rights, but no one has the right to compel any other workman to cease from labor, nor has the employer any right to lock out his workman in order to compel submission to obnoxious rule."

This seems to be a conspicuous example both of good law and good sense, and in these trying times, in which the general public is made to suffer so soon as a strike occurs, and in which the public finally pay all the losses which the employers sustain, it is eminently proper that some such restraints should be placed upon the actions of both parties to a strike.

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#### A Coming Revival.

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At the recent meeting of the American Medical Association there was abundant evidence of a renewed interest in the subject of therapeutics. The meetings of this section were unusually well attended. Many important and valuable papers were presented and the discussions were animated and interesting. This is as it should be, and is a natural reaction from the extreme pessimism of the last decade. Although the pessimism of the past has hindered investigations and experiment and been a drawback upon medical progress, yet we have received much benefit therefrom, because we have become impressed with the importance of therapeutic measures other than drugs in the treatment of disease.

For many years now we have been listening to the enthusiastic declarations of the gone-to-sleep doctor that he could do as well with five or six drugs as with the whole pharmacopeia, and of course nobody has been found bold enough to dispute these remarkable claims, for of course every man is the best judge of his own limitations. Nevertheless, it does not follow but that another man might do much better work if aided by a thorough knowledge of all the resources of therapeutics.

And then, too, here are our friends the surgeons, who, because they have greatly extended in the last ten years the field of operative work, seem to have jumped to the conclusion that surgery is the only part of medicine that has any practical application. The pessimism of some of the younger surgeons has become positively revolting, and leads one to conclude that modern surgery should be classed as a specialty, and that surgeons should not attempt to treat medical cases. The English plan of dividing the profession into two great classes—the sur-

geons and the physicians would seem to be worthy of consideration, for it would permit the surgeons to be untrammelled from the incubus of therapeutic nihilism—a nihilism that is due, in part, at least, to the fact that they are not competent to practice medicine because their experience does not tend to train and fit them for it. Another advantage that would follow from the plan of classing surgeons as specialists would be to give that much abused person, the general practitioner, a chance for his life. At present, between the increase of the number of specialties on the one hand and the number of surgeons on the other, the field of work of the general practitioner has been so narrowed that his chances of gaining a livelihood are becoming less and less every year. While it will be a bad day for the public, and for the profession, too, when the "family physician" shall have disappeared, yet if things go on as they have been going of late, what between the specialists, the surgeons and the therapeutic pessimism, the field of the general practitioner has been narrowed to the dimensions of Diogenes' tub.

It is the height of absurdity for the physician to prepare himself by four years of study devoted to anatomy, physiology, bacteriology, pathology, etc., if, when he comes to apply the knowledge gained, he is depressed by a prevalent feeling in the profession that therapeutics doesn't amount to much anyway. Of what use are all these things anyway except to increase our ability, to lessen and to cure diseases? Between the plan of entire dependence upon drugs to combat disease and the plan of physicians having no faith in therapeutics there must be a happy medium course—a plan in which therapeutics shall be the summum bonum of all the study and endeavor which has preceded it, and in which the profession will come to a realizing sense that doctors can ill afford to be pessimists in anything, and least of all in the field of applied therapeutics.

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#### Ascites and Abdominal Tumors.

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Dr. Osler, in a recent article, has drawn attention to the fact that ascites and hard abdominal tumors are generally found associated. Furthermore, he considers that in a majority of the cases the tumor, by pressure upon the veins or by interfering with the portal circulation, causes diapedesis, the serum leaks through the veins and ascites is the result.

Dr. A. Laphorn Smith, of Montreal, has endorsed Dr. Osler's views, and has further

contended that in a great majority of these cases of ascites accompanying hard abdominal tumor, that the tumors are malignant and that very frequently the ovary is the organ affected. He gives the same explanation as Osler of the ascites-pressure upon veins, but thinks that in some cases the discharge from the diseased ovary may either cause irritation of the peritoneum, and so increase the amount of fluid in the abdomen, or it may cause the stomata of the serous lymph channels to become plugged, so that the fluid cannot be readily removed.

In many of these cases albumin and casts are found in the urine, so that the physician who does not make a careful examination might conclude that the ascites was a part of a general Bright's disease, but removal of the tumor is followed by a disappearance of the albumin and casts.

The lessons to be drawn from these facts are, that in every case of ascites a very careful examination should be made for abdominal and pelvic tumors, and that if the fluid interferes with a proper examination it should be withdrawn and another examination then made. As a corollary of this, it is well to remember that tumors accompanied by ascites are often malignant and their early removal should be insisted upon.

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### Selections.

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#### The Employment of Digitals and Aconite in the Treatment of Cardiac Disease.

By H. A. HARR, M. D., Professor of Therapeutics in the Jefferson Medical College of Philadelphia.

Among all the difficulties which have beset the subject of the proper use of drugs in disease, and there have been many, as we all know, it cannot be doubted that the factor of greatest importance has been the employment of remedies by physicians without their having a correct conception, and sometimes no conception at all, of the pathological process underlying the condition which is to be relieved. This depends upon the fact that many practitioners lack preliminary training, not only in morbid anatomy and morbid physiology or pathology, but also fail to study the possible effect of well-known drugs in abnormal states. The employment of certain remedies in disease has cast discredit upon therapeutics by their abuse, while many physicians who have carefully studied diseased organs become so saturated, so to speak, with the seriousness of the lesions which they find, that they scoff at the

thought that drugs can be of service, forgetting that the vital powers are eliminated at the autopsy, and that the conditions present represent a state so grave that death has taken place—that is, the worst possible state of affairs is seen. I have made these opening remarks because I do not wish to be considered a therapeutic optimist or nihilist, and because I so often emphasize the fault of using drugs when they cannot do good that I fear I may be called a therapeutic unbeliever. In no class of cases does what I have said hold true with greater force than in those of cardiac disease. Some physicians are content to diagnose valvular disease, prescribe digitalis, and ignore the state of the heart muscle, the state of the blood-vessels and that of the kidneys, liver, and even the dose of the drug, so long as it is within bounds not poisonous.

It has always seemed to me that it is the duty of the physician to study the condition of the heart muscle, and almost entirely exclude any suppositions as to the condition of the valves of the heart. While this may be an exaggerated way of making the statement which I wish to emphasize, it is resorted to because in the majority of instances we are apt to endeavor to decide which segment is diseased without a correspondingly careful study of the condition of the ventricular wall.

Again, it is by no means an uncommon practice of physicians, after determining more or less carefully the condition of the heart, to fail to make a careful study of arterial tension, pulse force, and equally important, to attempt to discover whether there is arteriocalillary fibrosis. Upon the condition of the heart muscle, and upon the development of arteriocalillary fibrosis, much more depends in the diagnosis, prognosis, and treatment of a case of so-called cardiac disease than is usually thought. It is also not permissible to reach correct conclusions in regard to these important factors in the case unless at the same time the renal condition is adequately investigated. And, again, it is not sufficient in many of these cases to be content with one or two examinations of the urine, which may fail to reveal albumin, unless at the same time estimations of urea are also made, and a careful record of the quantity of urine and of its specific gravity is kept. Not only do these renal conditions aid us in getting information concerning the probable conditions of the heart muscle and of the blood-vessels, but they also give us an insight into the ability of the kidneys to eliminate poisonous materials

and the drugs themselves, both of which, if retained to an abnormal degree, produce results which are disadvantageous.

I have within the last few years devoted a great deal of attention, not only to these factors in these cases, but also to the question of the proper administration of the various cardiac stimulants, and equally important, as to the dose which each individual patient needs from day to day.

Digitalis, like iron, has proved itself so valuable, doing good in so many instances which seemed grave, that we are wont to forget that, like most things which do good, it can also do harm, and judging from my previous habit, and from the habit of other practitioners, I am convinced that in the great majority of instances digitalis is administered in doses which are much too large, and often continued over a period which is far too long. It is by no means an uncommon thing to find physicians administering as much as 10 or even 20 minims of tincture of digitalis three or four times a day in cases of marked rupture of compensation. There can be no doubt that in some cases such doses are necessary at the beginning of the treatment to meet the crisis which exists, and in much the same way that we are wont to give large doses of mercury in early syphilis, afterward cutting the doses down one-half, so it may be necessary at times to give massive doses of digitalis which, after a period, should be rapidly and considerably diminished. I have been surprised to find what excellent results I could produce by the use of such small amounts as one or two minims of an active, physiologically tested tincture of digitalis given three or four times a day, the patient being of course required to rest and so give his heart that most needed therapeutic aid when its compensation is ruptured.

Apropos of this, I may add that in my belief we often fail to get results from doses and from drugs upon which we rely, more because we are careless as to the physiological activity of the product than because we have made an error in judgment as to the remedy which is needed, or the dose which is required. With the important subject of the employment of drugs closely related to digitalis in the treatment of various cardiac conditions there is not space to deal in this paper. In deciding what cardiac stimulant is required in a given case, we must not only consider the condition of the valves and the myocardium as already indicated, but we must, if possible, reach some conclusion in regard to the state of the coronary arteries.

Digitalis, which improves the nutrition of the heart, largely by improving the circulation in these arteries, can manifestly do more harm than good, if these nutritive vessels are so nearly closed that it is impossible for the heart to pump blood through them in increased quantity. And again, the myocardium may have undergone such advanced degeneration that it is impossible for the digitalis to improve the nutrition of the heart, although at the same time it may be driving the remaining healthy fibers to an endeavor far in excess of their ability.

I am also quite sure that in a certain number of cases of valvular disease the patient does not require digitalis or any other cardiac stimulant for the relief of his cardiac symptoms; but, on the other hand, in addition to rest, will often be greatly benefited by the administration of aconite, which has the same steadying effect upon the heart through its influence on the vagi as has digitalis, while by its sedative influence on the heart muscle in cases of excessive compensation, and by its relaxing effect upon the blood-vessels, it diminishes the overaction of hypertrophy which is sometimes confused with the tumultuous overaction of ruptured compensation. It is much easier for us to conclude, in the case of valvular disease, with dyspnea and disturbed heart action, that these symptoms are due to a failing heart than that they are due to a hypertrophy and an excessive activity. Such cases I have frequently seen in men who are well developed, in the muscular sense, and whose occupation has caused them to do heavy manual work, or to take part actively in some of the severe athletic games. And not infrequently have I seen other cases in which the use of well balanced doses of aconite and digitalis have produced results which neither drug could produce by itself, although at first glance they are physiological antagonists.

Finally, the utter uselessness of expecting good results from either of these drugs in the treatment of certain cases of myocardium disease which persistently take severe exercise "for their health" needs to be emphasized. I have repeatedly seen cases of men of advanced years with somewhat fibroid blood-vessels who have mistaken the heaviness of advancing years for the heaviness of lack of exercise, and who on the golf field, on the bicycle, or by rowing or walking, have tried to drive away the symptoms from which they suffer, with a result that sooner or later the condition from which they are suffering becomes greatly aggravated, and they become more or less invalids if they are so fortunate

as to escape sudden or nearly immediate death from their ill-judged efforts. It seems to me, too, that when we are attempting to treat such cases, and are endeavoring to administer doses and remedies as accurately as possible, we should insist upon quiet and a careful mode of life until we are able to determine that the remedies suit the case, for otherwise the change of exercise or change in diet may not only prevent the remedies from doing good, but also warp our judgment as to our own plan of treatment, and prevent us from instituting it in another case, when in reality, had proper precautions of this kind been taken, we would have increased confidence and been able to do much good to a large class of patients, for it is not to be forgotten that every one in this room sooner or later, according to his years, his inheritance, and his mode of life, develops more or less arteriocapillary fibrosis, degeneration of his myocardium, and sclerotic changes in his kidneys.

I may close by saying that curiously enough a very large proportion of the patients to which I have recently referred are physicians who, after a long life of intense nervous strain, not infrequently find themselves at a comparatively early age suffering from disorders of the heart, which they fail to recognize, either because on examining this organ they fail to discover murmurs, or because they do not recognize the fact that a physician's life seems to be peculiarly apt, as is that of the banker and large business manager, to develop degenerative cardiac change. The employment of strychnine, belladonna, and other drugs, in connection with digitalis and aconite, might be discussed if time permitted, but they are not included in the title of this paper, and therefore cannot be considered.—*The Therapeutic Gazette*.

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### The Use and Abuse of Tobacco.

By ROBERT E. COUGHLIN, M. D., Brooklyn, N. Y.

My object in writing on this subject is to come, if possible, to an understanding as to the use and abuse of this much used and abused product. To do this I have decided to abstract from much of the literature of the subject such facts as have been stated by medical men and others from time to time relative to the same, and detail my observations in the practice of medicine as related to the matter.

*History of Tobacco.*—Although controverted, there is no doubt that the knowledge

of tobacco and its uses came to the rest of the world from America. Snuff taking was observed by Ramon Paul, who accompanied Columbus on his second voyage, in the year 1494.

The habit of tobacco chewing was first seen by the Spaniards on the coast of South America in the year 1502. Tobacco smoking was seen to be universal as the continent of America was opened up.

The term tobacco comes from the inhabitants of San Domingo and meant an apparatus like the letter Y, the two points of which were inserted into the nostrils of the smoker and the other end was held into the smoke of burning tobacco. In this manner the smoke was inhaled. This apparatus the natives called "tobacco."

The plant of tobacco was first taken to Europe by a physician who had been sent by Philip II. of Spain to investigate the products of Mexico.

The smoking habit through Europe was initiated and spread by English example. During the seventeenth century the habit spread with marvelous rapidity in the face of resolute opposition. Since this time, tobacco has been a fruitful source of controversy. Except as a medicine, it has met the most uncompromising opposition. The expectations as regards its medicinal virtues have been very disappointing.

*Diseases and Conditions said to be Caused by Tobacco.*—A recent writer has said that tobacco plays an important rôle in the causation of the presenile state. Tobacco vertigo is a common affection. Phthisis provoked by the use of tobacco in a young subject who inhaled has been reported. Digestive disturbances, alternating constipation with diarrhoea, dyspnoea, excessive urinary excretion, abundant sweatings, insomnia, palpitation, intermittent pulse, angina granulosa, cerebral congestion and functional cardiac disorders are all recorded as having tobacco as a cause. Poor health in the children of the poor who live in tobacco smoke has been observed. Tobacco amaurosis is a well-established condition as the result of tobacco, also tobacco amblyopia. Labial cancer is said to have been caused by tobacco. Color blindness, so Santos Fernandez states, may be caused by tobacco. Lack of proper physical development in the youth as compared with the non-user has been studied. Though his statistics are not convincing, one writer claims the depopulation of France to be caused by tobacco. Toxic symptoms of tobacco have been produced by the external use of the weed.



Lewri says that generally the sexual power and appetite are impaired and sometimes impotence occurs. He also mentions disturbed heart action, rapid and intermitting pulse, precordial anxiety, weakness, faintness, collapse, sclerosis of coronary arteries; left ventricular hypertrophy, diminished olfactory sensibility, chronic hyperæmia of the epiglottis and larynx, also of the trachea and bronchi, cephalic pressure, insomnia or sleeplessness, melancholy, aversion for work, ataxic symptoms, parietic weakness of sphincters, trembling, spasms, hallucinations of all senses, suicidal tendency, depression of spirits, attacks of fright, with tendency to violence and maniacal exaltation. Hall, of Texas, holds smoking to be the most noxious form of the weed. Tobacco, he states, is both an arterial and cardiac poison.

Grasset's observations show that the oxalate of nicotine, which is eight times less toxic than nicotine, will cause contraction of the pupils, paralysis, convulsions, salivation, cerebral anæmia, peripheral vaso-constriction and cardiac asystole.

Dumas reports a fatal case of angina pectoris ascribed to cigarette smoking. He also reports a fatal case of chronic gastro-enteritis.

A fatal case of gastric ulcer, due to chronic nicotinism, is reported by Farager.

Writers favorable to tobacco generally prefer to view tobacco as "one of God's good gifts to man," and quote Burtin's opinion, written 300 years ago: "Tobacco, divine, rare, super-excellent tobacco—which goes far beyond all their panaceas, potable gold and philosopher's stones. A sovereign remedy to all diseases. A good vomit, I confess; a virtuous herb if well qualified, opportunely taken, medicinally used; but as it is commonly abused by most men who take it as tinkers do ale, 'tis a plague, a mischief, a violent purger of goods, lands and health. Hellish, devilish, and damned tobacco—the ruin and overthrow of body and soul."

The economic side of this question shows that the people of our country spend annually over seven hundred millions of dollars for tobacco,—twenty per cent. more than is spent for bread, yet this represents but a minor part of the cost of the tobacco habit to the country.

The following cases may prove interesting:

CASE I.—J. M., age 40, a convalescent from a severe attack of pleuro-pneumonia combined with alcoholism, marked by alcoholic delirium. Convalescence was very

slow, so slow in fact that tuberculosis was expected. Patient, instead of gaining in weight, kept losing every day. Digestive disturbances very persistent, palpitation and dyspnoea troublesome. No heart murmur could be discerned. Moist mucous râles could be heard all over the chest. Tonics and cough mixtures prescribed galore; digestive medicines as well. No improvement. Accidentally the patient said that he was an inveterate tobacco user and that he had continued to smoke since leaving his bed. This seemed a clue to his debility. Was told emphatically that he must quit chewing and smoking. This he agreed to do. Improvement occurred at once and medicines were thrown aside in one week's time. This case illustrates how important it is to question cases similar to this one in regard to the use of tobacco.

CASE II.—Mr. B., age 50, symptoms of cardiac dilatation and degeneration. There was no improvement under treatment. A grave prognosis was made. Accidentally it was ascertained that this patient had persisted in chewing tobacco for the last thirty-five years. He averaged seven ounces per week of Virgin Leaf. At times nausea was produced, but appetite continued. At times he chewed on an empty stomach. This caused nervousness but no nausea. Limiting the tobacco to two ounces per week made a decided improvement. Could not prevail upon him to discontinue the habit.

CASE III.—C. M., age 21. Complaints of pain in region of heart, palpitation, loss of appetite, insomnia and great nervousness. Medicine gave only temporary relief. Heart very irregular and very intermittent, so that he could not work on account of the disturbance of his circulation. Confessed that he was a cigarette fiend, consuming between twenty and thirty every day. Habit was discontinued for a time with immediate improvement. He later renewed the habit, and the symptoms returned in an aggravated form. The last I heard of this patient he was in the hands of another physician who was treating him, as I understand, for stomach catarrh. It might be stated here that this young man inhaled and that no murmur was present.

CASE IV.—W. P., age 36. This patient when he smoked more than two or three cigars a day is attacked with "tremor cordis," a condition where the heart suddenly starts to beat at the rate of 120, 130 or 140 beats per minute. The condition may continue for five, ten or fifteen minutes, and as suddenly let up, and the heart beat again about



72 or 68, as is usual in health. The bladder is always felt to be full after these attacks and clear watery urine is at once voided. Digestive disturbances will cause this trouble as well. A discontinuance of the weed in this particular case causes this man to be certain he will have no attack. He is never safe from these attacks while using tobacco.

CASE V.—Mr. H., age 50. Widower. Came to me suffering with impotence. Said he was sure that his manhood was leaving him. Tonics and aphrodisiacs were administered without any improvement. A heavy cigar smoker, was told to cut down his smoking and, if possible, stop it. He consented to do the former, with good results.

CASE VI.—Mr. E., age 60. A confirmed cigar smoker, consumption about one dozen per day on the average. Laryngitis present also pharyngitis; broken teeth where he holds the cigar holder. Teeth dark and covered with tartar. Ulcerations on tongue and roof of mouth; gums spongy and bleed at the slightest touch. Suffers with digestive disorders. Complexion very sallow. Was told to cut down the habit or give it up entirely, which he refused to do, saying that he could not be happy without it and he would rather die of cancer than live the rest of his life without his cigars.

Other cases might be cited, but I believe sufficient has been related to show that tobacco may become very injurious.

On the other hand, I have conversed with any number of men who are positive that tobacco does them no harm and I have seen no reason to doubt them.

What is one man's meat is another man's poison is true as regards tobacco.

Recently I met a hale old man of seventy, who told me that he had smoked for fifty years without the slightest injury occurring from it. He smoked one of those very long pipes leading to the floor. Said he smoked continuously while awake and used the strongest, blackest and worst smelling stuff I have ever seen. Teeth fairly well preserved; no ulcer on mucous membrane of mouth or tongue. Lips dry but not irritated looking. As a reason for this he says that when the smoke reaches his mouth it is agreeably cool and not hot as it generally is in smokers of cigars and pipes.

A physician lately told me that he knew a man who averaged twenty-five cigars a day the year around, yet he was as healthy a man at forty as you could find anywhere. He has been doing this for at least fifteen years. He uses the blackest cigars he can find and never uses a cigar holder.

It is a mooted question as to whether cigars, pipe smoking or cigarettes are the most harmful. From my observation I would place the cigarette as the least injurious when not inhaled, the pipe next and the cigar the most injurious.

A writer in the *London Lancet* explains this as follows: He states that nicotine itself is not injurious, but that it is pyridine and its derivatives that are responsible for headaches, trembling and giddiness. He maintains that the degree of toxicity in smoking depends largely in completeness of combustion and that this is most thorough in the cigarette. The pipe is a condenser in which the products of condensation do not reach the mouth, while a cigar also condenses but with it a considerable part does reach the mouth. Hence he places the cigar first, the pipe next and the cigarette last in order of injuriousness.

The Royal Academy of Belgium gives the following advice to smokers:

Do not use moist tobacco, since nicotine then escapes with the vapor and is not decomposed.

Do not smoke while fasting or a short time before meals.

When smoking cigars or cigarettes, always use an amber meerschaum horn, or cherry holder.

Nicotine vaporizes at 250 degrees, and a portion of it which is not decomposed in the center is attracted toward the tip, and accumulates there; it is therefore prudent to throw away the last quarter of a cigar.

Do not smoke a short stem pipe.

Of all methods of smoking, the cigarette is the least offensive.

Emperor Frederick III., of Germany, and General Grant both died of cancer. It is said that they both insisted upon smoking the last third of their cigars.

Our late assassinated President is said to have been an incessant smoker, averaging twelve cigars a day of the best Havana make, one dollar apiece wholesale. Is it not reasonable to suppose that the rapid pulse he had during his fatal illness had a great deal to do with his previous use of tobacco? Then, again, might not the fatal gangrene around the track of the bullet have been caused by a disturbance in the circulation superinduced by the previous use of tobacco?

The personal equation or idiosyncrasy has a great deal to do with the baneful effects of tobacco. A moderate amount of smoking for one person would be injurious to another. A poisonous amount for one would be a pleasure for another. From my own observation, I

believe cigar and cigarette smoking to be on the increase. The latter I am told are used by society women and actresses to quite an extent. Egyptian cigarettes are the kind they smoke. Pipe smoking and chewing are undoubtedly on the decline. Snuff taking is obsolete.

If a man smokes two or three cigars a day, preferably after meals, with no disagreeable after effects, but on the contrary a feeling of exhilaration and comfort, it is reasonable to suppose that tobacco smoking does him no harm. It may be beneficial. As soon as there are any bad effects from tobacco then we know it is acting as a poison. Why one organism can tolerate any amount of the weed and another very little is difficult to explain.

Cigarette smoking is *per se* the ideal way to smoke. It is a short smoke, is clean (when the user makes his own cigarettes), little tobacco is consumed and combustion is complete. The trouble with cigarette smokers, as a rule, is that they inhale and are constantly lighting up a fresh cigarette, sometimes using as many as fifty in one day. Then again, they are being used more and more by the growing youth, and in this way mischief is accomplished.

Athletes will know the bad effects of smoking when training; on this account they never smoke while training for a contest. It is said that it interferes with the breathing and delays the "second wind" from occurring. Smoking on the "bike" is on this account a very bad practice.

Something might be said regarding the smoker's heart as related to life assurance. Medical examiners are often compelled to re-examine the pulse and heart on account of this condition; in fact, smokers' hearts give medical examiners no end of trouble. The rule is to reject applicants whose pulse is irregular and intermittent after the 40th year. In younger subjects, where the condition does not persist, these applicants can be rated as fair average risks.

#### SUMMARY.

In convalescents we should prohibit the use of tobacco until the patient's strength is fully restored.

In all functional heart cases we should look into the patient's tobacco history.

In impotence and sexual decline we should question our patients in regard to their use of tobacco, and accordingly instruct them to give up the habit.

In certain individuals tobacco has no bad effects, even when consumed in large amounts.

When tobacco gives a person an agreeable feeling of comfort following its use it does no harm, but possibly good.

It should not be used by the growing youth nor by women, on account of their susceptible nervous systems.

In their order of harmfulness the different ways of using tobacco may be set down: Snuff taking, chewing, cigar smoking, pipe smoking and cigarettes.

In conclusion, we might say that the use of tobacco is sometimes harmless, often harmful, and, generally speaking, an expensive habit.  
—*New England Medical Monthly.*

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#### Physiognomy.

By W. ARBUTHNOT LANE, M. S. (Lond.), F. R. C. S. (Eng.),  
of London, England, Surgeon to Guy's Hospital for Sick Children, London, etc.

*Gentlemen:*—I know nothing of greater interest than the study of the physiognomy of the race, which practically resolves itself into a consideration of the mechanical factors that determine the form of the bones of the face. It is of interest not merely from an esthetic point of view, which is of vital importance to the sex most liable to suffer from conditions of imperfect development of that part of the body, but the knowledge of the modification of the several factors upon which the face depends for its development assists one most materially in obtaining a scientific insight into the morbid states associated with variations in it.

The form of the face of the individual is influenced more or less by that of one or both parents from the hereditary factor. We will consider in their order of importance the several forces that exert an influence on the form of the bones of the face and of the cavities they surround.

By far the most important factor in the form of the face is the degree of development of the nasopharynx. When in a child the nasopharynx is fully developed, the upper jaw and the antral cavity it contains are correspondingly large. The lower margin of the orbit and the anterior and lateral aspects of the upper jaw are prominent and rounded, the malar bones project outward, the alveolar arch is horse-shoe shaped, the palate forms a long gentle sweep, being almost completely horizontal above the alveolar level, the lower jaw is correspondingly well developed, the lower incisors, in biting, close at no great distance behind the upper, the mouth, which is of fair size, is kept closed habitually, the upper lip covering the upper incisor teeth and project-

ing below their free margin, the nose is fairly broad, while the nostrils are widely open, oval and move appreciably even in ordinary respiration. The hair on the forehead ends abruptly, and the back is almost quite free from down. The chest is well developed and respiration is free, the measurement of the thorax varying decidedly during the process, which is normal in frequency. The child displays all the qualities which we are accustomed to associate with what is called health and these I need not enumerate further. A good volume of air passes constantly, freely and forcibly along the nasopharynx and it is chiefly on the presence of this mechanical influence that the nasopharynx and the bones of the face depend for their full development. But such a condition as I have just described is by no means as general as one would wish. Indeed, in large communities, and even among whole races, a very decided change can be observed to be taking place with comparative rapidity in consequence of peculiar conditions of life. Civilization entails a considerable modification in the mechanical relationship of the individual to its surroundings as compared to that which existed originally in the human animal, and we pay a very heavy toll for the possession of the advantages or disadvantages associated with it. We will now examine the several alterations in the physiognomy of the individual which result from an imperfect development of the nasopharynx consequent on a deficient passage of air through the nasal cavities or on the complete absence of this force. Instances of these conditions exist only too abundantly all round us, and I will proceed to describe a typical example and its mode of development. At birth the child's face and the structure of its nasopharynx and of the bones of the face are normal. It is most unusual to see any variation from this at this period of life. On rare occasions I have noticed the arch to be markedly higher than it should be, and very occasionally one comes across cases either of imperfectly developed or of excessively large lower jaws. In a child who had neither nose nor anterior nares, and in whom the nasal cavities must have been very badly developed, the palate presented the mesial elevation which so often appears later in life from a similar cause. The vast majority of children are perfectly normal at birth and continue to develop normally during the first, second and generally during the third year of life.

It is at the end of this period that changes in the form of the face and especially of the jaws and palate usually first attract notice.

For some reason or another the child has

become less vigorous. It may have been badly fed or kept frequently in a foul, close atmosphere, or it may have had some fever, as scarlet fever, measles, whooping cough, etc. From whatever cause the depreciation has arisen, it is remarkably inactive, or, if it displays activity, it tires very soon. It assumes habitually attitudes of rest, whether in the erect or sedentary posture, these after a time becoming fixed and producing deformities which have received recognized names, as dorsal excorvation, lateral curvature, knock-knee, flat-foot, etc.

Breathing is abnormally rapid and very superficial. It is practically entirely abdominal under ordinary circumstances. The circumference of the chest, which occupies a position of complete expiration, shows no variation whatever during respiration. The skin of the body is pale and opaque. The back is covered, especially in the median line and in the vicinity of the scalp, with a fine downy hair. This also exists on the backs of the arms and forearms. The veins on the chest and shoulder are conspicuous and are filled with a dark venous blood. Pressure on them appears to produce no movement of the blood, which seems to be quite stagnant. The skin of the trunk, legs and arms is marked off into innumerable little islands, because of the stagnation of the blood in the small vessels. In the cheeks minute blood-vessels can be distinctly observed, making up what patch of color the child may possess. The hands and feet are abnormally cold, and, if the weather is not warm, the skin of the hands and forearms is patchy, in some parts yellow and in others a livid purple. The ears are also cold and bluish. The joints are very loose, the elbows readily extending considerably beyond the normal, so that the forearm forms with the upper arm an angle open backward and the leg an angle at the knee open forward.

Any point on which even very slight pressure by the clothes is habitually exerted shows deposit of pigment in the form of a dirty stain. This is noticed especially around the neck, on the folds of the axillæ, along the spinous processes and on places on which the garments rub more than elsewhere.

These children hold the head well forward because of the flexion of the spine associated with the position of complete expiration of the thorax.

The hairy scalp presents no sharp outline in front, but encroaches on the forehead to a varying extent, in some children extending to the outer limits of the eyebrows. There is a deep hollow beneath the lower eyelid, where

the skin is bluish in color. The breadth of the face is less than normal and the cheeks are flattened. The form of the nose varies widely from the original shape inherited from its ancestors. If prominent, it is very much flattened laterally, its sides concave and it appears to spring abruptly from the face, or, if broad-based, it is hollowed laterally and vertically. The anterior nares form elongated, narrow slits, which show no appreciable alteration in shape during the movements of expiration.

Owing to the frequent tilting of the tip of the nose, the nostrils look more forward than in the normal condition. The upper lip is short. The mouth is kept open and the lip covers only a portion of the upper teeth, which are in young life freely exposed. Later, in adult life, by the exercise of the will, the individual may, and often does, acquire the power of keeping the mouth closed except when smiling or talking. The chin recedes to a variable extent and on approximating the jaws in the normal bite the lower incisors occupy a position behind the upper that is further back than usual. If this is a marked feature, the condition is described by the dental surgeon as "superior protrusion." When marked, it detracts considerably from the attractiveness of the face, but in a moderate degree only, it, with the associated evidences of degeneration and of physical incapacity, gives to the face that appearance which by novelists and poets is regarded as intellectual or refined. The curve of the imperfectly developed upper lip, as it stretches over the protruding teeth, is described as Cupid's bow. I feel I must refer you for further description to the works of these very unscientific professions who seem to see things from a sensual and imaginary rather than from an intelligent and accurate standpoint.

Still, the fact remains that to a considerable proportion of our fellow-creatures the indications of degeneration, when existing in a moderate degree, are considered to be attractive, especially in the case of the female subject. Another very good instance of this is the manner in which women simulate the extension of the hairy scalp on to the forehead by bringing hair, artificial or otherwise, down over it. The mouth is small and the angles of the jaw are, like the chin, very imperfectly developed. The size of the mouth varies with the development of the lower jaws, for the reason that very large jaws necessitate a larger aperture than the average when they are separated from one another, and the reverse is true of those that are imperfectly developed. Diminished prominence

of the symphysis and angle of the jaw gives a rounded appearance to the chin and neck.

On examining the interior of the mouth, the alveolar arch is compressed laterally and the palate is high, especially along the middle line, where it often makes an abrupt ascent. The height of the palate varies inversely with the development of the nasopharynx. The faucial tonsils are frequently large, as also is the lymphatic tissue constituting the pharyngeal tonsil.

The teeth, which are poorly developed, are often fixed rather loosely in their sockets, and their cusps fit imperfectly upon their fellows. The tongue is small.

All these conditions are consequent directly or indirectly on the absence of the developmental factor in the nasopharynx. This force has been reduced or deleted, in the first instance, by an infection of the nasopharynx by organisms producing a cold in the head. The nasopharynx is the portion of the child in which organisms most readily secure a foothold, and this liability to their presence varies inversely with the vitality of the individual. The vitality or resisting power can for all practical purposes be measured by the respiratory capacity to which it bears a direct and constant relationship. The feeble child has not the energy to spare and takes no pains to expel the mucus, etc., from the nose. It obtains with ease through the open-mouth-breathing air sufficient to provide for the carrying on of its modified mechanical relationship to its surroundings. The infection may not be limited to the nasopharynx, but may extend to the larynx, trachea, bronchial tubes or alveoli. Associated with, and in consequence of, the presence of the infection of the nasopharynx, the lymphatic masses forming the pharyngeal and faucial tonsils which drain this area become infected also. These again discharge into the cervical chain of lymphatic glands which in turn become inflamed and swollen.

You are well aware of the mode in which tubercle develops in the young subject. Two factors are requisite and exist in an ideal state under the circumstances just described. One is a *condition of low vitality* or, in other words, a *deficient resisting power* on the part of the individual. The other is the *presence of a suitable nidus or cultivation medium* in which the tubercular organism can grow and thrive free in its isolation from interference from those structures which meet it successfully under conditions of robust health. The inflamed gland, the vitality of which is depreciated by the presence of one lot of organisms or their products, forms the

cultivation medium, and owing to the frequency of their presence tubercular infection of the glands in the neck is remarkably common in subjects of the class referred to.

How are these cases usually treated? After a certain amount of medical treatment for the recurring catarrhal attacks, to which they are so liable, it is discovered that adenoids are present and the parents are given to understand that the child's troubles have been due to their presence and that, if not removed, many others will probably arise; also that they are certain to have no recurrence of the growth once it has been removed.

The operation is performed and in many cases the child breathes more freely for a longer or shorter time, *the amount of benefit derived varying inversely with the duration of the obstructive symptoms*. In a large number of cases the hopes raised in the parents' minds by the slight improvement following the operation are soon dashed to the ground by the reappearance of the obstruction, and in not a few cases the child is apparently worse rather than better for the operation.

Some surgeons who devote themselves to the study of diseases of the throat profess to exercise great care in the choice of the particular variety of enlargement of the pharyngeal lymphatic tissue, which, they say, they consider should alone be operated on, and pride themselves on performing the operation so skillfully that a so-called recurrence never takes place. I regret very much to say that, though I have seen many of these cases treated in this manner and rendered myself very familiar with every detail in their history, I have been unable to verify the accuracy of their statements by their practice in these particulars. However, this is but a side issue, as I merely wish to indicate at the present moment that the enlargement of the pharyngeal and of the faucial tonsils is only one of many effects and not primary causes, and that this must be taken into careful consideration in deciding on their treatment.

When the glands in the neck become affected with tubercle, the children are treated variously. Many medical men who appear to have no idea of the widespread existence of tubercle in these glands will inform the patient's parents that there is no suspicion of the presence of tubercle even when fluctuation is undoubtedly present. Some are given medicines, as cod liver oil, etc., or very often the latest drug in the market. Iodine is usually applied. Others are operated on, the glands being excised entire,

while abscesses are scraped. Very often the parents are assured that certain climates, as that of Margate, are specific, and the comfort of the home and the happiness of the household are seriously interfered with in order that these recommendations shall be put into practice.

They are too often disappointed by the appearance of other enlargements.

During all this time any effectual means of improving the child's resisting power by increasing the respiratory capacity is but rarely adopted, the treatment alternating between drugs, the seaside and the knife.

If the patient is a girl, the parents are frequently informed that, once menstruation commences, the swellings will subside rapidly.

The teeth of these children, a very important feature, are often very defective and become carious very early. Mouth-breathing, the indigestion from which they so often suffer and their diminished oxygenation, which renders them incapable of breaking up the food which they occasionally eat ravenously, assist materially in depreciating the resisting power of the teeth and of the tissues in which they are embedded, favoring at the same time the growth of organisms which settle upon them and destroy them. These dyspeptic and dental infectious troubles also help in producing enlargement of the faucial tonsils and of the lymphatic glands in the neck. The decay of the teeth also increases the indigestion, as it interferes with mastication, salivation, etc., and it keeps the mouth in a more or less foul state, producing material of a septic nature which, by its absorption by the stomach, produces an unhealthy condition of the mucous membrane of the organ and, in consequence, damages the patient's health. The boy escapes at an early age from constant association with his mother and nurse and engages in active sports, in which he of necessity breathes more quickly and has to keep his mouth shut in order to perform them efficiently. Considerable improvement in the respiratory capacity ensues in consequence.

The unfortunate female child too often continues to accommodate her physiology to that of her female ancestors and of her usually inactive nurse, when she shows no improvement but continues to get worse. The mother takes her to a dentist, who arranges to attack the deformity of her jaws and face when she arrives at the age of twelve or thereabouts, making no effort to interfere with its progress in the meantime. The aid of a competent staymaker at a later

date, by interfering with the free action of the diaphragm, results in a further reduction of the abdominal respiration on which the child has depended, and the dressmaker who stretches the material composing the body of the dress tightly across her flat, ill-developed chest helps to reduce the breathing capacity to a minimum, and so the sequence continues. Pregnancy, by necessitating for a period an efficient performance of the thoracic respiratory functions by an involuntary systematic course of breathing exercises, may permanently convert such a girl into a fine, healthy woman, but in many cases, after parturition, the position of thoracic expiration is merely complicated by a loose abdominal wall and the kidneys and other organs descend still further and flop about with greater freedom, seriously and progressively impairing the comfort, health and happiness of the individual.

The next factor in the development of the face to which I will call your attention is the complete eruption of the teeth. We are all very familiar with conditions of incomplete development of both jaws, and especially of the upper, due to noneruption or the too early removal of certain teeth. Here the deformity is in no way due to any imperfection in the development of the nasopharynx or in the respiratory capacity, though it frequently co-exists from the causes already described. The treatment of these conditions, so far as they are due to the teeth alone, comes solely within the province of the dental surgeon, who usually finds them very difficult to benefit materially.

The tongue is a mechanical factor of very great importance in the development of the lower jaw. A thorough recognition of this fact is of considerable service in practice, since by encouraging mastication and exercise of the tongue from early infancy by the use of a suitable "comforter," the tongue and the lower jaw can be simultaneously developed, the latter being enlarged and probably strengthened, the durability, texture and size of the teeth being also increased and improved by the process. Later in life the same purpose may be effected by the habitual use of American chewing-gum. In this way character may be given to a face which would otherwise suggest mental feebleness and indecision.

That the lower jaw varies in size with that of the tongue is shown by its excessive growth in those cases in which the tongue is abnormally large. I have been able to stay the growth of the lower jaw by reducing that of the tongue by excising a mesial

wedge from its substance. Conditions of the lower jaw due to excessive enlargement of the tongue are by no means uncommon. The simplest form is what in dentistry is called "edge-to-edge bite," in which the lower jaw is sufficiently enlarged that in approximating the jaws the edges of the incisors of the lower jaw impact on those of the upper.

With a greater increase in the size of the jaw the condition called "underhung bite" arises, the edges of the lower incisors passing in front of those of the upper when the mouth is closed.

In cases of edge-to-edge or underlying bite, in which the tongue is obviously large or the features of the parents suggest the probability of a steadily increasing deformity, much advantage may be obtained by removing certain teeth at an early date from the lower jaw, so depriving it of a very important factor in its development.

Another condition associated with an abnormal enlargement of the lower jaw is "open bite." This may be associated with a jaw which should be otherwise an edge-to-edge or an underhung bite, a varying interval existing between the opposing incisor and certain other teeth when the jaws are approximated to the utmost. This is due frequently, in the first instance, to an incorrect approximation of the molar teeth produced by a forward movement of those in the lower jaw upon the upper. When associated with mouth-breathing, as it may be primarily in many cases—and is of necessity always as a final result in severe cases—the condition is aggravated by the imperfect development of the upper jaw brought about by the absence of the habitual air pressure in the nasopharynx. For extreme conditions of this kind I have divided the lower jaw on either side, removed wedge-shaped pieces and then wired the fragments together in the best possible position.

Though the enlargement of the tongue would usually seem to be hereditary, I believe I have seen it develop in cases in which the tongue and jaws were apparently quite normal at birth.

To what extent the size of the tongue and jaw can be influenced by feeding with hard or soft foods is a matter of much interest and should be taken into consideration in the treatment of these cases. The whole subject of physiognomy is replete with interest and I fear I have been able to do little more than touch upon it in the brief time at my disposal. I trust, however, I have done so sufficiently to give some idea of how much



we hold in our hands the physiognomy and health of the children who are growing up around us under our observation and care.—  
*Philadelphia Medical Journal.*

### The Physician's Obligation to Secrecy.

By WILLIAM C. TAIT, LL. B., PH. D. (Tübingen), of San Francisco, Cal.

*American Medicine* of May 3, 1902, contains an article from the pen of William C. Woodward, LL. M., M. D., entitled "A Brief Statement of the Principles Underlying the Physician's Obligation to Secrecy." The medical profession will find the legal decisions bearing upon this interesting and intricate subject reviewed at length in the excellent work of Taylor, "The Law in Its Relations to the Physician." Before the appearance of Mr. Taylor's book, I had occasion to discuss the subject of privileged communications between physician and patient, calling attention to the contradictions in our various statutory regulations and judicial interpretations of the rule of professional secrecy, and urging the necessity of according the same degree of legal protection to the confessions of the patient as is universally granted to those of the client and the religious communicant.\* Dr. Woodward's article now furnishes the proof that my contention is supported by the time-honored traditions of the medical profession, for he says:

"So runs the Hippocratic oath. And so the physician has lived and practiced for 2,000 years and more. . . . Even so early in its history our profession was insisting that the sufferer might uncover himself to his medical adviser, body and soul, in his search for aid, without the vestige of right in his neighbor or even in the state to know what had passed between them."

Dr. Woodward believes, however, that our more complex modern conditions demand a departure in certain cases from the ancient rule of the profession, in the interest of society and the state. He says:

"But when we try to find the meaning of this formula as it bears upon present life, difficulties arise. What is it that ought not to be spoken abroad? Who shall be the judge in any particular case? And then, too, is there not in some cases a duty of disclosure opposed to this obligation of secrecy?"

Are these the natural and characteristic doubts of the modern profession, or are they only those of such of its members as have

made the study of the law a preliminary to the study of medicine, and then proceeded to mix them? Does not the average physician of experience answer the first of Dr. Woodward's questions in the true spirit of the Hippocratic oath, with "Nothing should be noised abroad," and the second with "None but the patient, if he is of full age, or a court of justice, shall be the judges."

All of our states have enacted laws providing in substance that the physician or surgeon shall not be compelled to disclose information acquired while attending his patient, without the latter's consent. Some states foolishly confine this prohibition to civil cases. These various statutes were enacted as much for the general welfare of society as for the benefit of the patient. The characteristic feature of all similar legislation is that it did not owe its existence to the failure of the physician to guard the secrets of the patient, but rather to the harm committed by the tyrannical and absurd policy of the state in forcing a disclosure in the supposed interests of justice. The state neither prohibits nor punishes the betrayal of professional secrets. It merely provides that the physician shall not be required to divulge them in a judicial proceeding. The statutes have merely sanctioned the universal custom of the medical profession. They abrogate the ancient rule of the common law, which unsealed lips of both the physician and the spiritual adviser. The state, by sanctioning this universal custom of physicians, recognizes the superior wisdom of the medical profession. We may say that Hippocrates was wiser than Solon, and that these beneficial statutes, which were aimed at the state rather than at the physician, were the fruit of the latter's unwillingness to betray the confidence of his patient, of his protest against the action of the state in forcing him to betray it.

The folly and contradiction of the old common law rule is well illustrated by the Duchess of Kingston case.

This was tried by the House of Lords in the reign of George III. The duchess was charged with bigamy, a crime once punished with death. Dr. Hawkins, the physician of the duchess, held the secret of her former marriage, and of the birth of a child, and was compelled by the celebrated Mansfield, against his protest, to divulge it. Mansfield, in reply to Hawkins, who thought the disclosure of the secret inconsistent with his professional honor, advised him that he would be guilty of no impropriety or indiscretion in disclosing the information, if required to do so by the court, but declared that he would,

\*Journal American Medical Association, August 11, 1899.



under other circumstances, "be guilty of a breach of honor or of grave indiscretion." Other witnesses also objected on the score of honor, but Mansfield made no distinction between Dr. Hawkins and the lay witnesses.

The law was commonly supposed to be the perfection of reason. Such was Blackstone's definition of it some time before the Kingston trial. Yet, in the matter of confidential communications it was lamentably unreasonable. Had Mansfield advised Dr. Hawkins not to answer the question concerning his knowledge of the marriage of his patient and of the birth of her child, his ruling might have obviated the necessity for legislation upon the subject of confidential communications between physician and patient. But he was, unfortunately, not of the opinion of Belloc, who, in his "*Cours de Medecine Legale*" (page 17), declares that "the tribunals never ought, nor have they the power, to exact from a physician the revelation of the secret confided in him because of his office. At all events he may and ought to refuse to tell. Religion, probity; nay, the rights of society, make this the law." Belloc thus sanctions the heroic attitude of the ancient practitioner who denied the right of the state to force him to divulge what had passed between himself and his patient. I believe Greek and Roman, as well as French law, denied this right to the state.

Should Dr. Hawkins have reported his information to the authorities after the second marriage of the duchess? I ask this question because Dr. Woodward says:

"The physician is likely to experience the greatest difficulty in determining his duty when he becomes aware that his patient is suffering from injuries, the outcome of the patient's own unlawful act. Injuries of this sort vary from trivial wounds inflicted possibly in some family quarrel to those resulting from criminal abortion or serious affrays and likely to terminate in prosecutions for murder. It is not probable that any physician will find difficulty in determining his duty in either of the extreme cases—in the first he will keep his secret, and in the last he will promptly communicate to the proper authorities the information he has acquired. . . . The law which determines the duty of a physician who, in the course of his professional work, becomes aware of the existence of a crime otherwise unknown, is not always clear, and its application to particular cases may be extremely difficult. In the absence of statutes regulating matters of this kind they are governed by a certain unwritten law known ordinarily as the common law. It is impossi-

ble here to undertake an analysis of the statutes regulating such matters; they vary with the jurisdiction in which they are in force, and what is law here is not law across the nearest state line. But where the common law prevails, any citizen having knowledge of a felony or of an act of treason which is about to be, or which has been committed, is bound to make the facts known to the proper officers so as to prevent the commission of the crime, or to bring the guilty parties to justice. The person, be he physician or not, who disregards this obligation, is guilty of the offense of misprison of felony or of treason, as the case may be."

His reasons for these views are as follows:

"The principle upon which it becomes the duty of the physician to report certain cases, even to the detriment of his patient, finds its justification in the fact that the state undertakes to secure to the individual citizen safety of person, property and reputation only so far as may be consistent with the safety of the community at large, and correlates its undertaking to an obligation on the part of the citizen to conduct himself so as not to jeopardize the general welfare. The state has long refused to guarantee safety to those guilty of felonies or treason, and the law of the state is necessarily administered upon the basis that this is known to every sane citizen who has reached years of discretion. The felon has by his crime made himself an outcast. Society owes him nothing further than a fair and impartial trial by a jury of his peers, and to this very trial he is entitled only on the presumption of his innocence. He may be lawfully killed by any one, if killing is the only means of preventing the felony, and the private citizen who knows of his crime may arrest him without warrant, and maintain the arrest if it becomes necessary, even at the cost of the felon's life. The citizen who, knowing of a felony, receives, comforts and assists a felon in order that he may escape punishment, himself becomes an offender against the law of the land. He who is acquainted with information relevant to the crime and fails to make it available for the use of the state in its efforts to bring the offender to punishment, does an act subversive of justice and tending to destroy government itself, and of him the state will demand punishment for his wrong-doing, even though the information which he has wrongfully withheld was communicated to him by the felon in his efforts to secure relief from his sufferings or to save his life. As it is the physician's legal duty to bring such an offender to justice, there can be no lawful obligation by

either implied or express contract authorizing or requiring him not to do so."

This is very strong and positive language. It is not true, however, that a felon has by his crime made himself an outcast. The commission of a crime does not deprive a citizen of all his constitutional rights save that of an impartial trial. Society may regard him as an outlaw and an outcast. The law, however, does nothing of the kind. It regards him as innocent of the crime until tried and convicted of it. This is one reason why the physician should not usurp the functions of court or jury, but guard the confession as religiously as the priest would, for the guilty patient may be acquitted. If he is, what shall prevent him from suing the physician for slander? It is a dangerous thing to treat even the guilty as outcasts. Here, in San Francisco, a leading daily was sued for libel by an acquitted murderer whom everybody believed to be guilty, but who was acquitted on his third trial. The jury awarded the plaintiff a verdict of several thousand dollars. The following scene from the *Duchess of Kingston* case illustrates the attitude of the law toward the prisoner at the bar:

Sergeant-at-Arms: "Gentleman usher of the Black Rod, bring your prisoner Elizabeth, Duchess Dowager of Kingston, to the bar." The prisoner when she appeared made three reverences and then fell on her knees at the bar.

Lord High Steward: "Madam, you may rise." The prisoner then rose up and courtied to his grace the Lord High Steward and to the House of Peers, *in return to which compliment his grace and lords bowed.* (Italics mine.)

His grace and the lords returned the compliment, because by the time-honored traditions of English law the duchess, although accused of a heinous crime, was theoretically innocent of it.

I do not believe that Dr. Hawkins, although convinced of her guilt, treated the duchess as an outcast. What might have become of his practice after her discharge, had he so treated his former patient? As it was, the secret had to be dragged from him. What if he had volunteered it? Would he not have been guilty of "a breach of honor or of grave indiscretion" had he disclosed the information even to the authorities? Dr. Woodward declares that the common law will demand the punishment of a physician who withheld information communicated to him by a felon in his efforts to save his life, or otherwise. That may be true, theo-

retically, but who ever heard of such a prosecution?

Do not both the priest and the attorney, who through their offices "become acquainted with information relevant to a crime and fail to make it available for the use of the state in its efforts to bring the offender to justice, do an act subversive of justice, and tending to destroy government itself? Yet the law unseals the lips of neither. On the contrary, it sanctions their silence by expressly prohibiting their testimony as to such information. Neither does the law permit the conviction of a husband or wife by the revelation of the confidences of either. In all of these confidential relations, the policy of the law is to suffer the guilty to go unpunished rather than to break down the barriers necessary for the preservation and welfare of society, and which the state has itself, in fact, erected to that end. The physician, as well as the attorney and the priest, invites confidence, for without this confidence his art would be in vain. The priest knows only the communicant, the attorney only the client, the physician only the patient. The priest will not suffer the church or the confessional, the attorney will not suffer his office, to become the adjunct of those of either the district attorney or the chief of police. Neither will the reasonable physician do so, unless he wishes to become involved in the mazes and meshes of the law. He will not assume that the district attorney is thoroughly familiar with the law of privileged communications, or that the chief of police is a man of discretion and knows his business, nor will he unbosom himself to either. The folly of a physician in reporting the confession of a crime is well illustrated by the case of *People v. Brower*, 58 Hun. 217, in which a New York physician followed the advice of Dr. Woodward and reported a case of criminal abortion. The facts of the case as disclosed by the testimony of the physician were that the defendant came to his office and said:

"For God's sake, hurry up, my wife has a fit or has fainted. Probably you would like to know what the difficulty is before you leave the office." I said, "Yes it might be a help to me, because I might need something that I would not take with me." He said, "This lady down to the house I am living with I am not married to, but I expect to get a divorce from my wife and get married. The lady is about three months gone in the family way, and she introduced a catheter with a wire in the womb, and after she had

introduced it far enough, I blew in it." I said, "What did you blow in it for?" He said, "We did it before and it worked all right." The woman died shortly after the doctor's arrival.

This testimony of the attending physician and that of the autopsy physicians was the only evidence offered at the trial. The jury convicted the defendant of manslaughter in the first degree. The doctor naturally supposed he had done his duty in disclosing so heinous a crime. Dr. Woodward says in his paper that "In the cases of criminal abortion the physician should not keep his secret, but promptly communicate to the proper authorities the information he has acquired." The physician in the Brower case followed this advice. The information of the crime undoubtedly came from him, for the defendant was convicted solely upon his testimony. The district attorney and the judge of the trial court both believed his testimony admissible. They had reasonable grounds for their opinions, for the highest court of the state had not long before declared that the rule of professional secrecy could not be invoked to shield a murderer. The facts of the two cases differed, but district attorneys and trial judges seldom draw the fine distinctions of appellate courts. The Supreme Court, to which the convicted and guilty defendant appealed, thought the physician had abused the confidence reposed in him by the defendant. Its judgment reversing the verdict for conviction was in substance a rebuke to the former. The court held that "the defendant employed a physician to save Mrs. Brower's life. His alarm and anxiety were great. He knew what had taken place, and suspected that it might be the cause of her sudden prostration, and felt that the physician ought to know it, and to govern his treatment accordingly. The physician did want to know. In this critical moment, for the sole purpose of saving the woman's life, he disclosed the secret to the physician to enable him to act rightly. To have withheld the disclosure would have made the defendant a consenting party to the woman's death. We have no doubt that the statute, both in letter and in spirit, protects the confidence thus reposed in a physician and forbids him to betray it."

Dr. Woodward says that in a doubtful case the physician should be sure before making a disclosure that the obligation not only is enforceable, but will be enforced. But how can the physician be sure, in a doubtful case, of such a duty? Can he solve this question by consulting statutes and judicial

decisions? If he does so, they will not solve his doubts, but will only increase his perplexity. He will not be able to reconcile their apparent contradictions, nor will he discover in them any general underlying principle, but will find that each case is governed by its own peculiar circumstances. He will, therefore, if a man of sense, conclude that the ruling of the judge is, after all, the only test in such matters. If he believes that he can accept the opinion of his attorney as law in a doubtful case, let him consult other attorneys, and learn that diversity of opinion among lawyers upon a point of law is as common as that of judges. What attorney can say positively, for instance, that a physician may, or may not, be compelled to disclose at a coroner's inquest a confidential communication of his patient, or whether he may, or may not, be compelled to furnish such testimony in a lunacy proceeding? The patient may waive his privilege. But how and under what circumstances does he waive it? Does the secret die with the patient, or are his heirs or executors entitled to know it for the benefit of his estate? All these and other questions relating to the law of privileged communications in the case of the physician are still unsettled. As this law is subject to the general law of evolution, for this reason even the simplest case is apt to be doubtful. The safest course for the physician to pursue is, therefore, to obey the injunction of the Hippocratic oath, to suffer none but the patient, when of full age, or the judge, to break the seal of professional secrecy. Let him follow the example of Dr. Hawkins, who, in a tyrannical age, destroyed his records and memoranda, so that neither the public nor the state might learn secrets intended for neither. Let him do as that man of honor did when asked by the prosecution to betray the confidence of his patient—first protest against the disclosure, then seek the advice of the court. If the practitioner follows any other course he will be likely to incur the fate which the taker of the Hippocratic oath invited upon himself in case of its violation—loss of the enjoyment of life, of the practice of his art, of the esteem of all men, at all times. The wise inventor of that oath, recognizing the necessity for professional secrecy, pledged the physician to maintain it, and made the enjoyment of life, public favor and esteem, etc., dependent upon its faithful observance, and caused him to invite upon himself, as a penalty for its breach, the very fate which its violation is likely to entail upon the patient. The physician gives the same pledge and promise

of secrecy, although unspoken, to every patient. The Hippocratic oath is the unwritten law of the medical profession of which the state at first refused, but was finally compelled, for the welfare of society, of which it is but the organ, to recognize the wisdom, at least in a general sense.—*American Medicine*.

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#### Superciliously Enlightened People.

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The day was when the invention of any new piece of labor-saving machinery acted as the sure signal for bloody riots. Why not? Here on hand was a class of men who, all through life, had done nothing but make the heads of pins, and now came along a machine that promised to finish the whole pin at a stroke. Did the machine have to eat and wear clothes and support a wife and children? Anyhow, these men did, and to this end their whole stock in trade was making the heads of pins. A very pitiful outfit, but the loss of it meant as much to the poor workingman as the loss of his whole law library to the lawyer, his whole materia medica to the doctor, or all St. Augustine, John Calvin and Jonathan Edwards to the minister—that is, outright starvation or the poorhouse.

Of course, enlightened political economists smiled in superior fashion on so benighted an ignoramus, stupidly refusing to look far enough ahead to see how this machine would some day support twenty workmen to one now, and make pins so plentiful in the market that every woman could afford to scatter them recklessly over the carpet, around her dressing-glass till the floor outdid in spangles the starry firmament on high—a prophecy which, as every husband knows, has today become literally true. But meanwhile hunger is an ugly spectre to face, and so is a broken-hearted wife and children crying for bread. Very cruel are the laws of sudden change, especially to the man whose fingers are all thumbs.

None the less, as all the world knows, one of the chiefest pleasures of enlightenment is the power it imparts to its possessor of laughing at the unenlightened. What reward would there be in learning to eat with a fork, if it did not enable one to jeer at the man who eats with a knife?

"No doubt they went by in the day time," said last winter a lady to her servant girl, of the shooting stars that had failed to put in an appearance the night before. "Lor! ma'am, but there beant no stars in the daytime," was the dazed reply. To witness the look of sublime astronomical superiority on the face

of the lady was a liberal education in the privileges of the higher culture. Yet if Bridget had been suddenly called on to give up her place in domestic service and earn her living in an astronomical observatory, where cataloguing stars, instead of washing dishes, would be called for, all this had been no laughing matter—to her at any rate.

Now, in this world of abrupt changes, experiences like in kind to this are going on on every hand. Who, in fact, dares to go to bed in these times without a fear lest before the coming morning some erratic man of science may have exploded on the world a theory that shall knock the foundations from under his whole past education, physical, social, political, moral and religious, and that presto! he shall find himself loftily derided for holding convictions that all his life had seemed to him solid as rock? Higher enlightenment, therefore, ought to have some mercy on such poor fellows as most of us are, and not to expect us in ten minutes to adjust ourselves to regular Mt. Pelee cataclysms. Only look, then, at a few of them with which these present days are rife, and which threaten the peace and comfort of thousands or even millions.

Take, for example, the Jews, and this new demand suddenly sprung upon them, that they shall give up the observance of their time-honored Sabbath and substitute in its place the Christian Sunday. A good many of their coreligionists have become so enlightened as to look askance on Genesis and Moses, and to pronounce them out of date scientifically, as well as bad for trade. Seeing that the Christians make the Jews shut up their shops on Sunday, and that anything like divine Mt. Sinai authority for Saturday is so very doubtful, why not give trade the benefit of the doubt and save one clear day in the week for money making, while still holding fast to one day for religion? This sounds pre-eminently enlightened.

Nevertheless, to the great majority of the Jews, the bare suggestion of such sacrilege comes home with a shock of horror. Has it not been the especial glory of the race that through ages of poverty, persecution and contempt they have clung passionately to the express command of Jehovah and stood ready to face every shape of humiliation and misery sooner than prove recreant to it? To renounce their Sabbath, would it not be tantamount to turning the back on the long generations of heroes and martyrs who have glorified the tragic history of the chosen people? Surely an ideal sentiment like this—unenlightened as it may

be in certain critical aspects—is not something to be laughed at in superior scorn. It may be seriously questioned whether it is not worth quite as much in the way of spiritual warmth and cheer as a round sum of shekels earned by briskly trading all through holy Saturday and going to synagogue on Sunday. Indeed, the Jews have long enjoyed the credit of being able to make as much money in five days as the Christians in six, and who knows but this noble idealism has put the vim into them to do it! It will never do to force enlightenment in too quick a hotbed, especially with the stimulating compost of mere ridicule and contempt. The yield that spins up under such conditions is not as good as the old slowly growing one.

Again, to take a look at another sudden change of base precipitated on the public of today—the widely recognized case before the courts of “Sunday Golf vs. Going to Church.” Many benighted people are still of the opinion that the most formidable perils that nowadays beset the church are due to the growth of agnosticism, Spencerian philosophy, and, perhaps, the higher criticism. Nonsense! This is paying quite too high a tribute to the intellect of the church’s foes, who, in the main, are as innocent as babes of any claim to such allegations. These perils are due to Sunday golf. Golf is the real “Spectre on the Pale Horse,” the real “Scarlet Woman” of the book of Revelation, that are now uncorking their fatal vials and pouring them over the heads of congregations till they dwindle and pine away. Turn the sheets of the daily press and read there how many associations of ministers are sending petitions to the presidents of country clubs, beseeching them to put a ban on golf, at least on Sundays. These ministers know where the real peril lies, and that to hope to preach as interestingly and exhilaratingly to the young lambs of their flock as golf does is wellnigh a vain illusion. For the singular thing to observe on the faces of all these young men and young women one encounters going out on Sunday mornings, with their bags of crooks and croziers, to celebrate the mysteries of the sacred day, is the look of manifest enlightened superiority these faces wear. If one happens to be on an electric car, going out to attend services at some country church, it requires more than the fortitude of one of Nero’s early martyrs to stand the look of contempt with which he is visited as the car stops just before the front of the unhappy tabernacle, and he actually rises to get out and enter the doors of so antiquated

an institution. Now, “noblesse oblige.” Doubtless the golfers are the enlightened, but why not manifest a little courteous consideration for the unenlightened? Rome was not built in a day, neither can golf think to supersede the church in the like space of time. Certain pagans, or country people, and certain heath men, or heathen, will still linger on as survivals. Why not be merciful to them!—*The Boston Herald.*

#### Heredity, with a Study of the Statistics of the New York State Hospitals.

By WILLIAM C. KRAUSS, M. D., Buffalo, N. Y., Consulting Neurologist, Buffalo General Hospital, Providence Retreat; Attending Neurologist, Erie County, German, German-Deaconess, Emergency and Woman’s Hospitals, Buffalo Eye and Ear Infirmary; Fellow of the American Neurological Association.

(ABSTRACT.)

Heredity has been defined as that peculiar property of an organism which transmits to its offspring the characteristics of its progenitors. If those characteristics are ones of grace, beauty and strength, the offspring will inherit the corresponding qualities of the parent; if, on the other hand, defect and infirmity are the characteristics of the sire, then these qualities will reappear in the young, often with renewed impetus and reinforcement. Moreover, while it is an easy matter for the higher and nobler attributes to become through custom and environment deflected and deteriorated, it is almost an impossibility for the baser and decrepit qualities and conditions to become regenerated and rehabilitated.

These laws hold good, not only in the human family, but in the vegetable and animal worlds as well; they follow exactly the same course and terminate at the same place. Out of propagated weakness there cannot come strength; out of defects there cannot come perfection. To me heredity is nothing more than a mirror, reflecting from one generation to another the grace, beauty and strength, or else the coarse, ugly, defective features of the one standing before it.

Heredity may also be compared to a composite photograph. If the facial lines of the individuals selected are regular, the facial angles of nearly equal degree, and the component parts symmetrical, the photograph will be clear, sharp and a good reproduction of the individual features.

If there exists asymmetry of the two facial halves, if the component parts are deformed,

irregular, and the facial angles of the individuals are of varying degrees, a composite photograph will be obtained that is blurred, distorted and defective. So also with a child of faulty parentage or grandparentage,—it represents the ensemble of the vices and defects of successive generations, unless arrested or attenuated by environment. As Kiernan has well said, heredity is a prophecy of what may be, not necessarily a destiny which must be.

The diagnostic value of a hereditary tendency to insanity depends largely on its degree. Thus the insanity of one parent would indicate a less degree of predisposition than that of one parent and an uncle, or still less than that of a parent and a grandparent, or of both parents. Again, the insanity of a parent and a grandparent with an uncle or an aunt in the same line may be held to indicate a stronger predisposition than even the insanity of both parents.

The significance of the insanity of parents will depend to a large extent upon the period of its onset. The insanity of a parent occurring after the birth of a child, if it arose from a cause adequate to excite it without previous predisposition, would be held, of course, as of no value in the formation of a hereditary tendency.

The insanity of relatives further removed than parents, uncles and aunts, brothers and sisters and first cousins, is not worth anything except in corroboration of nearer and weightier facts. But the influence of other related diseases to insanity occurring in those near akin, such as eccentricity, alcoholism, epilepsy, hysteria, hypochondriasis, vicious or criminal tendencies, and the like, may be of great import.

Perhaps nowhere is this doctrine of heredity more potent than in psychiatry; and in the statistics gathered and published by the different hospital systems, lunacy commissions and census reports, one can gain some idea of its strength and solidity.

The New York State Lunacy Commission, with the large and well conducted hospitals under its supervision, is able to furnish some figures on the frequency of heredity which must carry some weight and conviction even to those who are inclined to reject the doctrine of those who believe that its importance has been overestimated. The tables quoted are taken from the last annual report of the New York State Lunacy Commission, composed of Dr. Frederick Peterson, chairman, W. L. Parkhurst, Daniel N. Lockwood and T. E. McGarr, secretary.

## RECAPITULATION.

*Showing percentage of heredity of the twelve State Hospitals for the year 1899-1900 and since October 1, 1888.*

INSTITUTIONS.	1899-1900.			Since Oct. 1, 1888.		
	Heredity of whole number.	Exclusive of unascertained.	No heredity exclusive of unascertained.	Heredity of whole number.	Exclusive of unascertained.	No heredity exclusive of unascertained.
Utica S. H.....	26.5	30.	70.	29.6	51.4	48.5
Willard S. H.....	33.8	41.1	58.8	28.6	46.8	53.5
Hudson River S. H.	34.7	44.5	55.4	27.5	53.3	46.6
Middletown S. H....	26.4	28.2	71.7	29.4	31.6	68.7
Buffalo S. H.....	24.7	30.9	69.	21.1	31.6	68.3
Binghamton S. H....	36.2	40.1	59.8	32.9	43.4	56.5
St. Lawrence S. H....	35.8	52.1	47.8	33.8	50.7	49.2
Rochester S. H.....	31.6	34.1	65.8	27.4	39.	60.9
Long Island S. H....	17.5	33.9	69.	15.7	32.6	67.3
Manhattan S. H. E.	13.4	14.2	82.7	13.1	18.1	75.9
Manhattan S. H. W.	11.7	14.1	85.7	14.	18.6	81.5
Gowanda S. H.....	28.5	36.	63.9	31.2	42.9	57.
Matteawan S. H....	15.4	76.4	23.2	15.	56.	43.9

Percentage showing heredity, 1899-1900, 25.8; since 1888, 24.5.

Percentage exclusive of unascertained, 1899-1900, 36.6; since 1888, 39.7.

Percentage showing no heredity exclusive of unascertained, 1899-1900, 63.3; since 1888, 59.8.

Total number of cases admitted, 1899-1900, 6,361; since 1888, 61,257.

Total number of hereditary cases, 1899-1900, 1,202; since 1888, 14,526.

The hospital showing the highest percentage of heredity of the whole number for the year 1895-1896 was the Matteawan Hospital, with a percentage of 57.1; for the year 1898-1899, the St. Lawrence Hospital, with a percentage of 41.6; for the year 1899-1900, the Binghamton Hospital, with a percentage of 36.2, and since 1888, the St. Lawrence Hospital, with a percentage of 33.8.

Exclusive of the unascertained cases, the St. Lawrence Hospital showed the highest percentage for the year 1898-1899, with 56.6; for the year 1899-1900, the Matteawan Hospital, with a percentage of 76.4, and since 1888, the Matteawan Hospital, with a percentage of 76.4.

The lowest percentage of heredity for the year 1895-1896 was shown by the Manhattan State Hospital, with a percentage of 17.3; 1898-1899, the Matteawan Hospital, with a percentage of 15.3; 1899-1900, the Manhattan Hospital, West, with a percentage of 11.7, and since 1888, the Manhattan Hospital, East, with a percentage of 13.1.

Exclusive of the unascertained cases, the Manhattan Hospital showed the lowest percentage for the year 1898-1899, with a percentage of 16.6; the Manhattan Hospital, West, for the year 1899-1900, with a per-



centage of 14.1, and since 1888, the Manhattan Hospital, East, with a percentage of 18.1.

These percentages vary, of course, from year to year and the percentage of the whole number since 1888, as 39.7, is perhaps as correct an index of the true percentage as it is possible to determine.

It is a noteworthy fact that the reports of the New York State Hospital show that *maternal* transmission is increasing rapidly over *paternal* transmission, as shown by comparison of the figures given for the years 1895-1896 and 1899-1900.

Turning now to nervous diseases proper, we find heredity just as strongly represented in the various neuroses as was found for the psychoses,—there is transmitted in the organism certain diatheses which favor certain diseases, such as Huntington's chorea, Friedreich's disease, running through successive generations. These diseases are termed hereditary, familial, embryonic, and this succession is what is meant by the term direct heredity or organic heredity. The severity of the heritage depends very largely upon the number of members and branches affected. Here again, as in the study of psychotic heredity, we find that maternal transmissibility far exceeds the paternal.

Indirect heredity is heredity by transformation from other neuropsychic diseases, and is more common, but of less consequence than direct heredity. Given a neuron feebly endowed with enduring qualities, it is not improbable that any condition capable of reducing the general health may act with unusual virulence upon it. The result is a neuropathic disposition, or a nervous organization, with a tendency to yield readily to undue strains and unusual influences, though of themselves of no material importance. There is propagated from parent to offspring certain diatheses which favor certain neuropathic equivalents. Thus epilepsy, melancholia or inebriety, may favor the production of hysteria, chorea or neurasthenia, while in the succeeding generations, the transformation of the neuroses and toxic diatheses in propagation result often in imbecility. Thus the children of hysteric, epileptic, hypochondriac and syphilitic or alcoholic parents are liable to be imbecile. Phthisical parents also frequently beget imbecile children.

In the progressive degeneracy which leads to the extinction of families, imbecility is the next to the final stage, which ends with idiotic incapacity of reproduction. (Kellogg.)

There is thus nurtured a family tree whose

branches become heavily laden with neuropathic fruit, yielding and bending to the slightest zephyr until, through sterility, it becomes barren and lifeless and falls by the wayside in the struggle for existence.

The diseases of the nervous system are arranged alphabetically, according to their hereditary tendency, and also those which authorities are agreed do not belong to this category. The hereditary neuroses are divided into those of direct and indirect transmissibility.

Abscess, cerebral; no heredity. Acromegaly; no heredity. Adiposis dolorosa; indirect heredity. Amyotrophic lateral sclerosis; indirect heredity occasionally and direct. Anemia, cerebral; no heredity. Aneurism, intracranial; direct heredity occasionally. Angioneurotic edema; direct heredity. Apoplexy, cerebral (cerebral arterial disease); direct heredity very slight. Astasia-abasia; direct heredity. Bell's palsy; no heredity. Brown-Sequard's paralysis; no heredity. Bulbar paralysis, asthenic; no heredity. Bulbar paralysis, progressive; indirect heredity. Caisson disease; no heredity. Chorea, electrical (Dubini's disease); no heredity. Chorea, Huntington's; direct heredity. Chorea, Sydenham's; indirect heredity. Coprolalia; indirect heredity. Cretinism, endemic; direct heredity. Eclampsia infantum; no heredity. Embolism, cerebral; no heredity. Encephalitis, acute hemorrhagic; no heredity. Epilepsy; direct heredity, 33 per cent. paternal. Erythromelalgia; no heredity. Exophthalmic goitre; indirect and direct heredity. Hematomyelia; no heredity. Hematorrhachis; no heredity. Hemiatrophia facialis; direct heredity. Hereditary amaurotic idiocy; direct heredity. Hereditary ataxic paraplegia; direct heredity. Hereditary cerebellar ataxia; direct heredity. Hereditary cerebral diplegia; direct heredity. Hereditary hemiplegia; direct heredity. Hereditary spastic paraplegia; direct heredity. Herpes zoster; no heredity. Hydrocephalus, chronic; indirect heredity. Hyperemia, cerebral; no heredity. Hyperostosis cranii; no heredity. Hypochondriasis; direct and indirect heredity. Hysteria; direct heredity 75 per cent. maternal. Landry's paralysis; no heredity. Laryngismus stridulus; indirect heredity. Leptomeningitis, acute; no heredity. Leptomeningitis, chronic; no heredity. Little's disease, congenital; direct heredity. Locomotor ataxia; indirect heredity. Menière's disease; no heredity. Meningitis, alcoholic (serous); no heredity. Meningitis, epidemic cerebrospinal; no heredity. Meningitis, tuberculous; direct he-



redity. Migraine; direct heredity. Morvan's disease; no heredity. Muscular atrophy, arthritic; no heredity. Muscular atrophy (Charcot-Tooth); direct heredity. Muscular atrophy (Duchenne-Aran); indirect heredity. Muscular atrophy, occupation; no heredity. Muscular dystrophy, progressive (Landouzy-Déjerine and Erb types); direct heredity. Muscular hypertrophy, pseudo; direct heredity. Myelitis, acute, transverse; indirect heredity. Myelitis, chronic; no heredity. Myxedema; no heredity. Neuralgias; indirect heredity. Neuritis; indirect heredity, tendency to alcoholism. Neuromata, true, multiple and plexiform; direct heredity. Occupation neurosis; indirect heredity. Ophthalmoplegia, progressive; no heredity. Pachymeningitis cervicalis hypertrophica; no heredity. Pachymeningitis hemorrhagica interna; no heredity. Paralysis, agitans; direct heredity (rare). Paramyoclonus multiplex; indirect heredity. Paresis; indirect heredity. Poliomyelitis, acuta adultorum; no heredity. Poliomyelitis, acute anterior; 1-2 per cent. direct heredity. Rabies; no heredity. Raynaud's disease; indirect heredity. Saltatoric spasm; indirect heredity. Scleroderma; indirect heredity. Sclerosis, combined of anemia; no heredity. Sclerosis, multiple; indirect and direct heredity. Spasm, facial; indirect heredity. Spasm, habit; indirect heredity. Spina bifida; direct heredity. Syphilis, cerebral; indirect and direct heredity. Syringomyelia; no heredity. Tetanus; no heredity. Tetany; no heredity. Thomsen's disease; direct heredity. Thrombosis, cerebral; no heredity. Torticollis; direct and indirect heredity. Tumors, cerebral; no heredity. Tumors, spinal; no heredity.

DIRECT  
HEREDITY.

Amyotrophic lateral sclerosis.  
Aneurism, intracranial.  
Angioneurotic edema.  
Apoplexy, cerebral.  
Astasia-abasia.  
Chorea, Huntington's.  
Cretinism.  
Epilepsy.  
Exophthalmic goitre.  
Hemiatrophia facialis.  
Hereditary amaurotic idiocy.  
Hereditary ataxic paraplegia.  
Hereditary cerebellar ataxia.  
Hereditary cerebral diplegia.  
Hereditary hemiplegia.  
Hereditary spastic paraplegia.  
Hypochondriasis.  
Hysteria.  
Little's disease.  
Meningitis, tuberculous.  
Migraine.  
Muscular atrophy (Charcot-Tooth).  
Muscular dystrophy (Landouzy-Déjerine and Erb types).  
Muscular hypertrophy, pseudo.  
Neuromata.

INDIRECT  
HEREDITY.

Paralysis, agitans.  
Poliomyelitis, acute anterior.  
Sclerosis, multiple.  
Spina bifida.  
Thomsen's disease.  
Torticollis.  
  
Adiposis dolorosa.  
Amyotrophic lateral sclerosis.  
Bulbar paralysis, progressive.  
Chorea, Sydenham's.  
Coprolalia.  
Exophthalmic goitre.  
Hydrocephalus, chronic.  
Hypochondriasis.  
Hysteria.  
Laryngismus stridulus.  
Locomotor ataxia.  
Muscular atrophy (Duchenne-Aran).  
Myelitis, acute transverse.  
Neuralgias.  
Neurasthenia.  
Neuritis.  
Occupation neurosis.  
Paramyoclonus multiplex.  
Paresis.  
Raynaud's disease.  
Saltatoric spasm.  
Scleroderma.  
Sclerosis, multiple.  
Spasm, facial.  
Spasm, habit.  
Syphilis, cerebral.  
Torticollis.

No  
HEREDITY.

Abscess, cerebral.  
Acromegaly.  
Anemia, cerebral.  
Bell's palsy.  
Brown-Sequard's paralysis.  
Bulbar paralysis, asthenic.  
Caisson disease.  
Chorea, electrical; Dubini's disease.  
Eclampsia infantum.  
Embolism, cerebral.  
Encephalitis, acute hemorrhagic.  
Erythromelalgia.  
Hematomyelia.  
Hematorrhachis.  
Herpes zoster.  
Hyperemia, cerebral.  
Hyperostosis cranii.  
Landry's paralysis.  
Leptomeningitis, acute.  
Leptomeningitis, chronic.  
Menière's disease.  
Meningitis, alcoholic (serous).  
Meningitis, epidemic cerebrospinal.  
Morvan's disease.  
Muscular atrophy, arthritic.  
Muscular atrophy, occupation.  
Myelitis, chronic.  
Myxedema.  
Ophthalmoplegia, progressive.  
Pachymeningitis cervicalis hypertrophica.  
Pachymeningitis hemorrhagica interna.  
Poliomyelitis acuta adultorum.  
Rabies.  
Sclerosis, combined of anemia.  
Syringomyelia.  
Tetanus.  
Tetany.  
Thrombosis, cerebral.  
Tumors, cerebral.  
Tumors, spinal.

### An Efficient Substitute for Salicylate of Sodium.

By DR. JAHL, of Pilsen.

In recent times numerous reports have appeared on aspirin, which have called attention to the great advantages of this preparation as a substitute for the salicylate of sodium. I have no hesitation in also emphasizing the efficiency of the remedy, as I have had an opportunity to test it in many cases of articular rheumatism, with very striking results. It is hardly necessary to say anything regarding the chemistry of the preparation, which is now so well known. It is best given in wafers, or it may be stirred with sugar in a little water, thus forming an agreeable drink. Its administration in cold milk has also frequently proved useful.

The favorable action of aspirin depends upon the fact that it passes unaltered through the stomach, and is decomposed only in the alkaline intestinal juice. It must be especially pointed out that it does not disturb the stomach, and if properly used acts rapidly and reliably. In dose of 60 grains daily it was well tolerated, without any unpleasant by-effects, which remained absent even if the dose was increased to 90 grains, except that occasionally the patients referred to a slight dull feeling in the ears. Ordinarily 60 grains pro die were amply sufficient. The pains in the affected joints became less on the second or third day. The perspiration, which is sometimes very profuse after salicylate of sodium, was never so marked and disagreeable after aspirin, although in all cases moderate sweating was observed.

During the presence of the influenza epidemic in this city, which was particularly characterized by marked pains in the back and muscles, these were very favorably influenced by aspirin in daily doses of 60 grains, and disappeared often at the end of three or four hours. They recurred, however, but in the course of three or four days were completely relieved, in connection with the disappearance of the fever. Neuralgias following influenza were also much benefited by the drug.

At any rate, aspirin is to be preferred decidedly to salicylate of sodium, and is at the very least as serviceable, without sharing in its unpleasant by-effects, such as tinnitus, gastric disturbance, and cutaneous eruptions. In influenza I am led to regard aspirin as a specific.

In a few cases of gastritis the administration of aspirin in 7-grain doses, three times daily, produced distinct benefit, the fever

being reduced, and any existing diarrhea ameliorated. Its use in typhoid is worthy of consideration.—*Allg. Wien. Med. Zeitung*, September 17, 1901.

### The Neighborhood Nurse.

One of the difficulties of the physician who practices among people of poor or even moderate circumstances, and especially in the country, is to secure competent nurses. The superiority of the graduated, trained nurse cannot be questioned; indeed, her advent has introduced a new and finer epoch in the treatment of the sick. Nearly every community has seen and appreciated this. But the fact remains that comparatively few families can afford the \$15.00 to \$30.00 a week asked—justly enough, for it is worth it—for this trained professional service; therefore, the majority must get along as best they can without outside help, depend upon the assistance of kind-hearted neighbors, or call in some untrained and probably incompetent neighborhood nurse.

Now the neighborhood nurse is usually a well-meaning person—a female of advanced years who has experienced her share of the vicissitudes of life, and now in the sundown of her days has taken up nursing as an occasional occupation. We all know her—many of us to our cost! What young doctor has not come out second best in his contests with this woman? Whether she is a friend and ally or considers herself superior to the physician's orders, he never knows. But certainly dependence upon nursing of this kind is a thing to be abhorred, if anything better can be hoped for.

Why is it not possible for physicians to undertake the training of neighborhood nurses to meet this evident demand—not, of course, to compete with the graduate nurse. There are plenty of intelligent young women who would be glad of an opportunity to earn the \$7.00 to \$15.00 a week, with board, which many people could pay who could not afford the greater luxury of the professional nurse. With a good knowledge of the elements of physiology, which is to be obtained now-a-days in almost every public school, the young woman could enter upon a course of reading and practical training, under the guidance of her physician, to include such subjects as invalid cookery, the care of the sick room, the invalid's bed, the patient's personal needs, such as bathing, enemas and douches, bandaging, obstetrical nursing, the care and feeding of infants,

accidents and emergencies, etc. There are plenty of text-books which treat of these subjects in such a simple manner as to be perfectly intelligible to any woman of good average intellect, while the doctor could supply the practical knowledge and the stimulus necessary for persistent work. There are few communities which would not welcome neighborhood nurses educated like this and give them an abundance of work.—*The Med. Stand.*

## News and Abstracts.

### Mississippi Valley Medical Association.

The twenty-eighth annual meeting of this society will be held in Kansas City, Mo., Oct. 15, 16, 17, 1902.

The program covers the whole field of medicine and includes many important papers by physicians and surgeons of national reputation.

### New Journal.

Electro-Therapeutics, Radiography, Thermo and Hydrotherapeutics are practically and thoroughly covered in the *Journal of Advanced Therapeutics* (800 pages, issued monthly, \$3.00 per year).

The reader is invited to join the "Founders" Club, and to all who order during 1902 the price is \$2.00 for the first and *each succeeding year*. It is only requisite that you address the following order to "*Advanced Therapeutics*," 156 Fifth Ave., New York. Send me until countermanded (to Dec., 1902, free) the journal, commencing Jan., 1903, per year \$2.00, for which I will pay at the close of the year.

### Practice for Sale.

See advertisement in this number.

### Recent Advances in the Treatment of Insomnia.

This paper by Professor Reynold Webb Wilcox, New York, is a continuation of one which Professor Wilcox presented to the British Medical Association at its meeting in Montreal in September, 1897. At that time he developed three theories which had been more or less accepted as accounting for the phenomena of sleep. These are: First, the theory of cerebral anæmia; second, the theory of chemical origin, and third, the theory

of the neurons. Investigations in the interval have tended to confirm and strengthen the neuron theory. In his earlier paper, Professor Wilcox presented the hypnotic which best corresponded to the theory of sleep, and this he repeats in the present paper. According to this statement the theoretical hypnotics should contain methyl alcohol radicles CH<sub>3</sub>, and chlorine, and should be safe, reliable and palatable. To the hypnotics mentioned in his Montreal paper he now adds Chloretone, and shows how completely it meets the theoretical requirements. It contains a double allowance of methyl alcohol radicles, and a sufficiency of chlorine in the combination CC<sub>13</sub>. Its safety has been proved; its reliability has been tested in a multitude of clinical observations, and, except for a temporary and not unpleasant flavor of camphor, it is perfectly palatable. In conclusion, the paper suggests the value of this preparation for the production of hypnosis, and refers incidentally to its antiseptic qualities as a local dressing, and its availability for the production of local anesthesia.—*The Medical News*, April 14, 1900.

### "Are You in Pain?"

You will probably ask this question more frequently than any other. Nothing appeals to one more strongly. To be able to relieve pain, whether it be a slight nervous headache or the more excruciating suffering from a severe neuralgia, brings the height of pleasure to both patient and attendant. The ideal remedy must not only do its work, but it must also do it quickly. Touching this point is an article in the *Boston Medical and Surgical Reporter*, by Hugo Engel, A. M., M. D. The author says: "Antikamnia has become a favorite with many members of the profession. It is very reliable in all kinds of pain, and as quickly acting as a hypodermic injection of morphia. It is used only internally. To stop pain one five-grain tablet is administered at once; ten minutes later the same dose is repeated, and, if necessary, a third dose given ten minutes after the second. In 92% of all cases it immediately stops the pain." Farther on, Dr. Engel compares Antikamnia with the other coal-tar derivatives. He says that while some of these are valuable remedies for the relief of pain, "not one of them is so certain in its effect in comparatively as small a dose and so prompt in giving relief as Antikamnia in every kind of pain." This uniformity in its action leads him to believe that Antikam-

nia possesses properties differing from the other coal-tar products, while it is certainly free from danger, if given in anything like reasonable quantities, which is not the case with other products from coal-tar. Five-Grain Antikamnia Tablets afford the most accurate and convenient form for administration.

**DIDN'T KNOW THE PLACE.**—A young man who had left his native city to study medicine in Paris, and had been applying his time and the paternal remittances to very different purposes, received a visit from his father, who intended making a short stay in the capital to inspect its wonders. During an afternoon stroll together, the day after the elder's arrival, the father and son happened to pass in front of a large colonnaded building. "What is that?" said the senior, carelessly. "I don't know, but we'll inquire," answered the student. On the query being put to an official, he shortly replied: "That? It is the School of Medicine."

#### Sugar a Cause of Indigestion in Infants.

ROLLA, N. D., Aug. 8, 1902.

*To the Editor:*—It is a surprise to me that in all the articles on infant feeding and prevention of gastrointestinal troubles in infants that I have been able to find, no one calls attention to one of the most prevalent and most pernicious causes, namely, the early and persistent feeding of sugar, which somehow or other mothers, midwives or some old women manage to keep up, often in spite of the specific orders of the attending physician, and even when a trained nurse is in attendance. In a fairly extensive practice of ten years I have always been able to trace such troubles in infants not suffering from organic disease to this most unfortunate habit, and to cure by a simple but efficient laxative and the exclusion of sugar. I have found scores of cases where it had been given after orders to stop it had been issued, and where I was assured that it was stopped. It is a mania with a class of women, and I have been astonished and grieved to find that this class includes a very great number, who, in every other respect, would be ashamed of any deceit. My experience is that even one grain of saccharum album a day will make the baby fret and finally present all symptoms of gastroenteritis.

Yours truly,

THOR MOELLER.

—*In Jour. A. M. A.*

#### Ecthol in Scarlet Fever.

By JOHN M. TURK, M. D., Canton, Ga.

I feel called upon to say something plain and practical in regard to the usefulness of ecthol in the above disease. I have used ecthol for one year in an epidemic of scarlet fever, and I must say that it has more than met my most sanguine expectations. It has accomplished more than any agent I have ever used in a practice of forty-three years. Ecthol robs scarlet fever of all the distressing sequels, such as nephritis, ear complications, adenitis, membranous angina, etc., if the remedy is given early enough and as often as every two or three hours, in bad cases, until desquamation is over, then not so often. A great many of my cases were malignant and quite a number ushered in with convulsions. In some of my malignant cases I gave double the prescribed dose. It prevents in a large degree the disintegration of cellular tissue, and will not disappoint any who may use it in scarlet fever.—*New Orleans Medical and Surgical Journal*, May, 1902.

**GOOD CROPS BRING PROSPERITY.**—A Georgia farmer made \$100 from an acre of watermelons and the nearest doctor made \$200 from the same acre.

**SEALING OF ASEPTIC WOUND.**—H. O. Marcy (*Annals of Surgery*) believes that clean-cut operative dissection is a very important step toward obtaining primary union. For germs to grow it is necessary to have a favorable soil, and this is produced by tearing, bungling, blunt dissection, clamping of much tissue, and tying of many ligatures. Therefore, not only should the operative field, the surgeon's hands and the instruments be rendered aseptic, but, at the end of the operation, the tissue left in the patient should be as little damaged as possible. Like tissues should be closely apposed by buried, absorbable sutures, preferably of tendon soaked in 1-1000 bichloride, and finally the skin wound closed by an absorbable subcuticular suture. Catgut and silk are discarded because their twisted surfaces give many crevices for the lodgment of infectious material. Such perfect apposition, with physiological rest, gives rapid primary union, and very little serum exudes. Therefore the heavy bungling dressings in common use should be dispensed with and iodoform collodion used. There is nothing to come out and the collodion allows nothing to enter.—*Medical News*.

### The Treatment of Pneumonia, Including the Hypodermic Injection of Saline Solution.

Neuhoff, in the *Medical Record* of May 11, 1901, reaches the following conclusions as to the status of the saline infusion treatment in acute croupous pneumonia:

It is a useful adjunct to other treatment in selected cases.

It acts as a powerful heart stimulant when other heart remedies can no longer sustain the flagging circulation.

It increases the secretions, and moistens the tongue and throat as well as the skin. It lessens the delirium. Other observers have noticed that it also improves the respiration, but of this Dr. Neuhoff is not himself convinced.

It is contraindicated in pulmonary edema.

Some pneumonia patients apparently die of collateral pulmonary edema not consequent on a failing heart. In these cases saline infusions are not applicable. Other pneumonia patients apparently die from heart failure, or a pulmonary edema caused by heart failure. In this latter class of cases the saline infusion averts the tendency to death by sustaining the heart when nothing else can, and thus it gives additional time for a favorable turn to occur in the disease. —*The Therapeutic Gazette*.

### The Question?

After many satisfactory trials of a remedy have you ever experienced a time when all the indications were the same, yet the article prescribed did not seem to give results?

You invariably presumed that the old stand-by had lost its efficacy, when in all probabilities you were not using the genuine product but a substitute.

In diseases of women such as leucorrhea, endometritis, gonorrhea, vaginitis, etc., where so much depends upon actual results, it is imperative that the genuine Micajah's Medicated Uterine Wafers are used and not a substitute.

Only successful preparations are imitated, hence the large number of substitutes of the genuine Micajah on the market.

REMARKABLE SYMPTOMS.—“Well, Patrick,” asked the doctor, “how do you feel today?”

“Och, doctor, dear, I enjoy very poor health intirely. The rheumatics are very distressin', indade: when I go to slape I lay awake all night, an' my toes is swelled as big as a goose hen's egg; so whin I sthand up I fall down immajit.”

### Milk Diet in Chronic Intestinal Catarrh.

An exclusive milk diet should have a trial in every case. Skimmed milk can be taken in larger quantities and with less repulsion, and is therefore to be preferred. The exclusive milk diet can be varied with buttermilk, koumiss, or wine-whey; and fruit juices, as orange-juice, lime-juice or tamarind-water please the patient without doing harm. In the case of adults, as well as children, the milk is made more digestible by diluting it with barley-water or rice-water, or by adding transformed farinaceous food to milk in the form of Mellin's Food and other foods of this class.—*Pepper's "System of Medicine."*

EARLY DIAGNOSIS OF TUBERCULOSIS.—Since it has become the rule to examine the sputum of all doubtful cases, many errors in diagnosis are avoided. M. Henkel (*Munch. Med. Woch.*) points out, however, that frequently no expectoration can be obtained. When the physical examination of the apices is negative in these cases it is important to remember that not infrequently the tuberculous deposits may have their seats in other parts of the lung, such as the lower lobes. The first signs, as a rule, are obtained by auscultation, and consist in a dry, creaking sound, often of musical character, heard best in the supraspinous or infraspinoous fossa, or in the intrascapular region. A slight evening rise of temperature is rather suggestive. Finally, where all other means fail, direct aspiration of the lung may be practiced and the obtained blood examined for bacilli. If done slowly and carefully, this procedure is never attended with danger.—*Med. News*.

TOMMY'S SUCCESS.—Mrs. Cawker: “I am so glad that my little boy went to the head of his class this morning. How did you come to do it, Tommy?”

Tommy: “The rest of the fellows had guessed all the other ways of spelling the word.”

TREATMENT OF PRE-SENILITY.—Ferguson details a case of impotence following a prolonged attack of gonorrhea. It was his third attack, and his virile power was almost lost and he suffered from frequent micturition. He had in addition orchitis on both sides. The case was peculiarly obstinate and many remedies had been used to no purpose. He had already exhausted the resources of several quacks. Sanmetto was prescribed in teaspoonful doses three times a day and improvement and recovery followed. —*Medical News*.

New York and Philadelphia.

### Violent Endometritis Cured by Applied Blood, without Curettage.

Florence B., age 30 years; American. Diagnosis, endometritis. Patient admitted to hospital March 2, 1902. She was greatly anæmic and emaciated. Was so weak that she had to be carried from the carriage to her bed. Discharge was so profuse that unless proper appliances were used it would run from her almost constantly.

This condition had existed for four years, and during that period she had been twice curetted, but no result or relief obtained. Examination revealed the uterus to be in a highly diseased condition, so much so that I advocated a vaginal hysterectomy, or, at least, a thorough curettment. To these propositions both the patient and her friends absolutely declined to agree, and begged that I employ some other treatment. I therefore without any promise of result determined to employ bovine injections and applications. On the 3d of March, after the patient's secretions had been regulated, I commenced treatment by washing out the uterus and injecting a solution of bovine and salt water, two-thirds bovine and one-third salt water, and tamponing the vagina with bovine pure. Internally she was given two teaspoonfuls of bovine every hour in peptonized milk and a little water. The vaginal injections and tamponing were employed twice in 24 hours, up to March 14th. At this time the discharge had entirely ceased and the uterus was becoming smaller. The uterine washings now were employed once in 24 hours, and, instead of bovine tamponings, vaginal injections of the bovine pure. Internally, the bovine was increased to a wineglassful every two hours. March 18th, the patient was up, and went for a short walk, and returned in splendid condition. Had gained 4 3-4 pounds in weight. On March 23d, the uterine injections were discontinued, and the vaginal injections employed once in 24 hours. At this time the uterus had assumed its normal size, and all evidence of inflammation had disappeared. The patient was looking and feeling splendidly. Therefore local treatment was discontinued. April 1st she was discharged cured, but instructed to return at intervals for examination and continue the bovine internally indefinitely.

This case was certainly an extreme one, and by all gynæcologists an operation would have been deemed, I think, an absolute necessity.

T. J. BRIGGS, M. D.,

Sound View Hospital.

### Some of the Causes and Effects of Mouth Breathing.

Ingersoll (*Buffalo Medical Journal*, January, 1900,) says that in children the most frequent cause of mouth breathing is adenoid growths in the naso-pharynx. Hypertrophied tonsils and nasal polypi are also frequent. Deformities of the septum or turbinated bones sometimes occur. The results of the condition are many and widespread. The facial bones are not properly developed, the air-passages are in a state of chronic inflammation, there is a feeling of languor, a lack of endurance, and sometimes a functional heart trouble may be found. Deafness is common, and frequently causes inattention and an appearance of stupidity. The symptoms are relieved by the removal of the obstruction.—*Med. Fortnightly*.

HER IMPRESSIVE SILENCE.—“Arrah, docthor, an’ may th’ saints bless ye fer koindniss t’ me sick b’y! Shure, he’d be as dead as a shillalay if it beant fer ye.”

“Don’t mention it, my good woman; don’t mention it.”

“Shure, docthor, Oi’ll niver till a soul.”

AUTHORITATIVENESS IN SCIENCE, and especially as to such a question as that of the communicability of tuberculosis from cows to human beings, cannot be allowed to influence our actions. The importance of the matter is too tremendous to receive its solution at the hands of any single scientist, however eminent he may be. In a general way the scientific world is even now far too prone to be influenced by authority. The only authority is truth, and this is reached by impersonal methods with the consensus of many minds. There is a body of evidence and of opinion of scientific men adverse to the statement that the human disease is not derived from bovine tuberculosis, and this is so great that dogmatic affirmation without demonstration has but little weight. The authority of Koch in the matter has no more value than that of many other less famous men. Indeed, with the dramatic fiascos of the Berlin Congress and of the Italian Mosquito Expeditions fresh in our minds, one is inclined to an especial distrust of the pronunciamientos of the Berlin scientist. We must indeed freely admit that the question is still *sub judice* and await with open minds a settlement that is to come from the quiet decision of many laboratory workers rather than by the *ipse dixit* of the Congressional rostrum.—*American Medicine*.

# Phillips' Emulsion

50% best NORWAY COD LIVER OIL  
minutely sub-divided,  
WITH WHEAT PHOSPHATES (Phillips')

Pancreatized, Palatable, Permanent, Miscible in Water, Milk, Wine, etc.

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TONIC AND RECONSTRUCTIVE.

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WHEAT PHOSPHATES, WITH MURIATE OF QUININE AND STRYCHNINE.

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PHILLIPS' SYRUP OF WHEAT PHOSPHATES.

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## The Antiscorbutic Element

**T**O insure healthy nutrition in an infant, his food must contain the antiscorbutic element. *The persistent deprivation of fresh food is the most frequent direct cause of infantile scurvy.*

### FRESH, RAW COW'S MILK CONTAINS THE ANTISCORBUTIC ELEMENT

Dr. Cheadle states: "In no instance have I seen scurvy arise in an infant at the breast, or when fed on an ample supply of good cow's milk. . . . Children brought up on dried foods alone are apt to become pallid, deficient in robust vitality, and even rachitic." Also, "Although sterilized milk answers admirably for a time, children kept on it throughout eventually lose firmness of flesh and vigor, and do not thrive into robustness."

Mellin's Food is a milk modifier. Its purpose is to adapt fresh cow's milk to the needs of the infant.

It is therefore evident that a diet of fresh cow's milk and Mellin's Food is ANTISCORBUTIC.

MELLIN'S FOOD COMPANY, BOSTON, MASSACHUSETTS

No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.



**Chronic Eczema.**

A confrère asserts that he obtains the radical cure of eczema where it occurs in isolated patches on the upper extremities and so rebellious to the ordinary method of treatment, as follows: After having washed thoroughly with soap and water the part and dried it, he rubs in vigorously a 50-per-cent. solution of caustic potash by means of a plug of cotton tied to a rod; he then washes the spot freely with water, and, finally, paints it over with a 50-per-cent. solution of nitrate of silver, and envelops the whole in aseptic cotton. This dressing is left in place until the cicatrix is formed beneath the slough, or from one to two weeks. The itching ceases immediately after the application of the caustics. Out of thirty cases thus treated, only one required the operation a second time.—*Med. Press and Circular.*

**A LESSON IN DENTISTRY.**—"What are the first teeth called?" asked the teacher of the juvenile class.

"Milk teeth," answered the class in chorus.

"Correct. Now who can tell me what the last teeth are called?"

After a prolonged silence a little fellow raised his hand as if struck by a sudden inspiration.

"Well, Albert," said the teacher, noticing the uplifted hand, "you may answer."

"False teeth," proudly responded the youthful observer.—*Nashville (Tenn.) American.*

**Can be Depended on to Increase Weight and Strength.**

Dr. B. T. Landers, of Ava, Mo., says: I used Manola in a case of anæmia, chlorosis, bordering on tubercular diathesis, and was well pleased with the results I got from it. I will continue to use it in all cases of debility or malnutrition, when there is need to improve the appetite and restore the system to a normal standard, and I unhesitatingly recommend Manola in all cases where a quick, strengthening, vivifying effect is desired, and I deem it one of the best tonics on the market. The patients rapidly gain strength and increase in weight from its use.

Respectfully, etc.,

B. T. LANDERS, M. D.

Ava, Mo.

**Benzine in Surgery.**

Franke (*Centralblatt für Chirurgie*, No. 11, 1901,) has for some years employed benzine in cleaning the skin after the application of ointments; this renders the removal

of the dried and often adherent masses extremely easy. The rubber adhesive plaster, which sometimes adheres so firmly to the skin that when it is pulled off it causes not only a great deal of suffering but even actual excoriation and bleeding, can be removed painlessly if after raising one corner of the plaster a pledget of cotton soaked in benzine is pressed against the rubber surface. Benzine has a very feeble action upon pus bacteria. It is to be preferred to ether as a means of cleaning the skin, because it is cheaper, does not produce the same cooling effect, causes no irritation even of the tenderest surfaces, and serves admirably for the removal of fat.—*The Therapeutic Gazette.*

**PAPINE.**—In discovering this drug Battle & Co. has conferred a lasting favor on the medical profession. We know the opium of which they make their Papine is the best. Papine has a place in my medicine case and it is emptied as often as any vial in the whole case. I nearly always have a bottle with my obstetrical cases for after pains and always feel it will do the work. I used it lately on a case of threatened abortion with excellent results, also in a case of severe uterine colic. I find that with Papine I do not have to use my hypodermic syringe so often.

W. E. RUSSELL, M. D.

Wyatt, Texas.

**WHY HE LEFT.**—Cleverton: "I thought you were going to stay up in the country another day."

Dashaway: "I was; but they wanted me to go to a Sunday-school picnic."

**Treatment of the Umbilical Cord.**

The best ligature is 1-16 inch wide sterilized tape. This tape should be kept in a closed bottle filled with boric acid saturated solution. Antisepsis is of great importance in treatment of the cord, inasmuch as umbilical sepsis is a very frequent and fatal affection. The cord should be gently squeezed, or milked toward the abdomen before tying the ligature, to avoid including a possible hernial protrusion of gut and its inclusion in the ligatured stump.

The tape ligature should be one foot long, to enable one to make sufficient traction to cut through Wharton's jelly. Unless the ligature is tied tight enough to do this, it may get loose through shrinking of this jelly and permit hemorrhage. Here, likewise, lies many a cause of infant death.

It may or may not be best to tie the

THE BEST RESULTS ARE ASSURED IN BROMIDE  
TREATMENT WHEN YOU SPECIFY  
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AND THE GENUINE IS DISPENSED.



NEUROLOGISTS and General Practitioners prefer it because of its superior qualities over the commercial salts. . . Each fluid drachm represents fifteen grains of the combined chemically pure Bromides of Potassium, Sodium, Ammonium, Calcium and Lithium.

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**R**E-ESTABLISHING portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.

Hepatic  
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Without  
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In CARDIAC and GENERAL MUSCULAR RELAXATION,  
due to Functional Cardiac and Circulatory Disturbances,

# CACTINA PILLETS

Has many Advantages over other Heart Stimulants.

IT HAS NO CUMULATIVE ACTION, AND  
IS ABSOLUTELY SAFE AND RELIABLE

EACH PILLET REPRESENTS ONE ONE-HUNDREDTH OF A GRAIN CACTINA, THE ACTIVE PROXIMATE PRINCIPLE OF CEREUS GRANDIFLORA

DOSE: ONE TO FOUR PILLETS THREE TIMES A DAY.

SAMPLES MAILED TO PHYSICIANS ONLY.

The CHIEF Characteristics of the Physiological Action of

# SENG

Is to promote Normal Digestion by encouraging the flow of Digestive Fluids.  
It is the Modern and Most Successful Treatment for  
**INDIGESTION.**

A PALATABLE PREPARATION OF PANAX SCHINSENG  
IN AN AROMATIC ESSENCE.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES A DAY.

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placental end of the cord. Personal rule is to let the cord bleed when it is much distended with blood just before it is severed. A certain amount of stiffness in the placental body is an assistance in its expulsion by the uterus; but, inasmuch as so many uteri partially close in the lower segment before the placenta has come away, it is better to render the placenta as small as possible by letting the blood drain out of it.

In cutting the cord one should gather the cord in the palm of the hand and cut it half an inch from the ligature with some short, blunt scissors.

In dressing of the cord a sensible precaution is to burn the raw ends of the stump with nitric acid or the actual cautery, though this is often omitted. The cord stump being about one and one-half inches long, it should be well dusted with a powder composed of equal parts of bismuth and boric acid and wrapped with a five-inch pad of sterilized gauze, which has been split from one side to the centre, and then bound tightly to the abdomen with the customary binder.—*Ayers, Obstetrics, N. E. Med. Monthly.*

#### Its Distinctive Feature.

One needs but to review the physiologic activities of the remedies recommended as tonics and reconstructives to realize the fact that practically all of them have some secondary effects which detract from their clinical value. It may be that they irritate the stomach and thereby excite repulsion on the part of the patient or even induce nausea and vomiting; some of them are astringent, others primarily stimulating, but secondarily depressing—and so on through the entire category of remedies, objections more or less serious may be found. It is, therefore, a matter of great importance to employ a remedy which is not only free from deleterious by-and-after-effects, but which adapts itself to use as a routine remedy in the many and diverse conditions that call for tonic and reconstructive medication.

The one remedy which many years of experience proves is entirely free from detrimental effects, is Gray's Glycerine Tonic. This preparation is of pleasant taste, agrees perfectly with rebellious and sensitive stomachs, patients never tire of its continued administration, and it is extremely effective in restoring tone and vigor to the entire system.

The entire freedom of Gray's Tonic from anything like drug effects is one of the strongest reasons why the best element of the medical profession have adopted the remedy for

routine administration in all conditions associated with impairment of general health, lack of nervous energy, general exhaustion—in anæmia, malnutrition, neurasthenia, and in chronic wasting diseases.

THE PURDUE FREDERICK Co.

No. 15 Murray St., New York.

Do your duty, little man,  
That's the way!  
There's some duty in the plan  
Of every day.  
Every day has some new task  
For your hand;  
Do it bravely—that's the way  
Life grows grand.  
"Do your duty," sing the stars,  
That so bright  
Through the midnight's dusky bars  
Shed their light.  
"Do your duty," says the sun  
High in Heaven;  
Unto thee, when duty's done  
Joy is given.  
Joy and peace and light and love  
Crown thy life,  
Victory true courage wins  
After strife.  
Do your duty, never swerve,  
Smooth or rough—  
Till the Master, whom we serve  
Says, "Enough."

—Selected.

#### Castor Oil in the Treatment of Neuralgia.

Harold M. Moyer (*Jour. Am. Med. Assn.*) reports several cases of neuralgia which he has treated with castor oil with good results. The results with acute neuralgia were, as might be expected, better than with the chronic, although even, in the latter only one failure is recorded, when a patient with a neuralgia of the third division of the nerve on one side continued the treatment for two or three weeks with no improvement in the symptoms. The oil is administered in the morning before breakfast, and the dose is from one to two ounces. The most efficient means of administration is in ale, preferably Doghead or Bass', which contains a large quantity of gas. When first given it acts freely on the bowels, but if continued daily its cathartic effect rapidly diminishes. The author does not think that the value of this oil in neuralgias is due to its cathartic properties, but thinks it probable that substances are present in it which have not been fully identified, which substances may have some effect on the sensory nerves.—*Med. Record.*

"One great advantage of Fellows' Syrup is that its composition is known, constant (as far as we have been able to judge), and stable. Some imitations of it that we have seen certainly did not possess the latter essential quality."—*Dublin Med. Jour.*

**A Product of the  
Highest Nutritive Value**

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**ARMOUR'S**  
**Extract of**  
**Red Bone Marrow**

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This preparation is rich in the elements that are necessary to the economy. Its administration increases the percentage of hemoglobin, causes the red corpuscles to multiply, enhances the oxygen carrying power of the blood and stimulates the appetite.

Physicians with cases of Anemia, Marasmus and other obstinate diseases, should try the Extract of Red Bone Marrow and note results.

One to four teaspoonfuls in cold plain or carbonated water, beer or with Nux Vomica, dilute Phosphoric Acid and Fowler's Solution.

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### A Plea for the Radical Treatment of Hay Fever.

After a brief sketch of the historical data of the disease, Clark (*The Chicago Clinic*, Aug., 1899,) reiterates the statement made by Sir Andrew Clark in 1887, that there are invariably three factors at work in the determination of an attack of hay fever — (1) a neurotic habit, (2) an intranasal pathological condition, (3) an external exciting cause. The lack of any one of these three factors makes an attack of hay fever impossible. The first is the most difficult cause to treat successfully, and the third can only be avoided by removal to a locality where it does not exist. The intranasal lesion can always be treated, and with a fair prospect of success. The treatment may be either palliative or radical. The former gives temporary relief, but does not cure. Radical treatment consists in the removal of all abnormal conditions found in the nose. Polypi should be removed with the snare and their bases touched with the galvano-cautery. Hyperæsthetic areas must be treated with the galvano-cautery or some counter-irritant, such as iodine. Author is of the opinion that our chances for success in the treatment of the disease by attacking the intranasal lesion diminishes just in proportion as the neurotic element becomes pronounced.—*The Medical Dial*.

### The Right Word.

"Are we too original in our costumes?"  
 Asked the bicycle girl; "what say you?"  
 "Well," said he, "perhaps that is not quite the word;  
 How would aboriginal do?"

I have employed the Pepto-Mangan (Gude) in a case of marked secondary anæmia with profuse gastrointestinal hæmorrhages, due to an ulcer of the stomach, with most excellent results. The patient, an extremely weak woman who was somewhat disinclined to take any kind of medicine, praised within a short time the very agreeable taste of the preparation, and her appetite and condition of nutrition improved very rapidly, so that at present she exhibits a very healthy appearance. Pepto-Mangan has been regularly continued in her case.

According to my other experiences I am warranted in concluding that your Pepto-Mangan, owing to its agreeable taste and ready digestibility even in the presence of impaired gastric function, belongs to our most valuable ferruginous preparations.

DR. AUG. HAMMER,  
*Medical Councillor; City Phys.*

THE CONTROL OF VENEREAL DISEASE.—We are, however, inclined to agree with our contemporary, *American Medicine*, when it says that these measures [the recommendations of the committee of fifteen as to the control of prostitution] are at best but "Reformed by Rosewater." What, after all, is most needed is to grapple with syphilis and gonorrhea themselves, as diseases which demand expert study and prevention by the means used in other branches of medical practice. Why not pass laws, it is suggested, similar to those in force for other infectious diseases, which are a far slighter menace to the public health. According to this view venereal disease should be reported to the properly constituted medical board, with the same punctiliousness that smallpox or diphtheria are reported, and the victims of the disease watched with the same scrupulous care. Some such plan as this, with the lock-hospital which should be its accompaniment, must go hand in hand with the educational reforms upon which the New York Committee lays special stress.—*Boston Med. and Sur. Jour.*

SEVERAL MEALS BEHIND.—"Is it true," asked the benevolent lady, "that you often have to go without a meal?"

"It is, ma'am," replied Tattered Thompson. "This breakfast you have given me was due on the morning of May 7th, 1889."

HEART DERANGEMENTS.—I take great pleasure in adding my testimonial to the great value of Cactina Pillets in all heart derangements, especially in those that require a heart stimulant. Digitalis has been my main reliance in the past, but Cactina Pillets, in many instances, for convenience of administration, safety and reliability, has entirely supplanted it.

H. C. CLAPP, M. D.

Mendon, Mich.

### A Nutritive Lemonade for Febrile and Wasting Diseases.

The patient who has been put on a liquid diet has a very limited choice of articles. Milk, beef-tea, whey, barley-water, and lemonade comprise about the entire bill of fare. Some of these preparations have little nutritive value, while milk soon palls upon the patient. A pleasant addition to the dietary is, therefore, welcome. Dr. R. W. Leftwich (*Edinburgh Medical Journal*, May, 1902,) proposes a white-of-egg lemonade, which is at its best when made in the following manner:

# NOW WHAT IS IT?

**"Read only that from which you may derive benefit."**

Even these words are important only to those whose privilege it is to profit by them. Of course, we cannot hope to convince you by a mere statement when an actual, personal experience is needed to prove the truth of our assertion. But the professional experience of thousands of physicians is daily demonstrating the fact that "Colden's Liquid Beef Tonic" (Ext. Carnis Fl. Comp. Colden) composed of Beef, Iron, Cinchona, and Brandy (Prep. No. 1); and of Beef, Cinchona, and Brandy, alone, (Prep. No. 2)—represents the "ideal combination of a Food, a Tonic, and a Stimulant." This fact may persuade YOU to try it; the result of the trial will prove the truth of our assertion.

The CHARLES N. CRITTENTON CO., Sole Agents for the United States.


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THE ALKALINITY OF BLOOD SERUM

## GLYCO-THYMOLINE

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Birmingham Nasal Douche.

### A PURGATIVE *For Mucous Membrane*

INDICATED IN ALL CATARRHAL CONDITIONS, ESPECIALLY

## NASAL CATARRH

"Glyco-Thymoline (Kress) is well adapted for the treatment of catarrhal conditions of the mucous membranes. I have frequently employed it with benefit in nasal, buccal and bronchial affections. Direct local medication is of much advantage in these cases. In some instances we may safely depend on topical measures alone; in those where internal treatment is also necessary, Glyco-Thymoline (Kress) proves an excellent adjuvant."

MEDICAL BULLETIN, Phila., Pa., March, 1899.

**SPECIAL OFFER**

A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges.  
K & O Douche to physicians, 15 cts.; \$1.50 per doz. Retail 25 cts. Remit stamps.

KRESS & OWEN COMPANY, Chemists, 221 Fulton Street, New York

**HASTENS RESOLUTION AND FOSTERS CELL GROWTH**

Two lemons; the whites of two eggs; 1 pint of boiling water; loaf sugar to taste. The lemons must be peeled twice, the yellow rind alone being utilized, while the white layer is rejected. Place the sliced lemon and the yellow peel in a quart jug, with, say, two lumps of sugar. Pour upon them the boiling water and stir occasionally. When cooled to about the ordinary temperature of tea, strain off the lemons. Now insert an egg, whip, and when lemonade is in full agitation, add slowly the white of egg. Continue the whipping two or three minutes more. While still warm, strain through muslin. Serve when cold. The white of egg imparts a blandness which makes the addition of sugar almost unnecessary, and this absence of sweetness is greatly appreciated by the feverish patients. This lemonade is a most excellent drink throughout the course of typhoid. Probably contraindicated in Bright's disease, and in gastric ulcer.—*Merck's Archives*.

#### Touching.

He was a gay bicycler.

When death blew out life's torch

His club 'graved on his tombstone,

"He's gone on his last scorcher."

#### 200 Consecutive Cases of Diphtheria Treated with Antidiphtheritic Serum.

By A. J. TONKIN, M. D.

[*Lancet*, October, 1899.]

The general death-rate is reduced to *three per cent.* when treatment is instituted during the first three days. In laryngeal cases treated early, the mortality is considerably reduced.

There is less need for tracheotomy if treatment be begun early, and the tracheotomy mortality is very much lessened. The chances of nephritis are lessened; albuminuria, if present, will be slight and will sooner disappear.—From abstract in the *Canadian Practitioner and Review*, March, 1900.

#### Reaction Among Mental Healers and Faith Curists.

Some recent reactions in circles previously devoted to the entire repudiation, not to say villification, of medical science are worth noting. First: Newspapers report that vaccination has been allowed in Dowie's "Zion," and that this leader, being unable to save his own daughter from a painful death, sought the services of a practicing physician.

Second: While cases, of course, are not published, owing to established professional ethics, it is well known to the profession that physicians are nowadays often being consulted by Eddyites, even by prominent members

of the sect, and that occasionally some of these are to be found in our hospitals. Third: The lecturer for a certain mental-healing society tells her followers distinctly that if they need a physician they had better go to one. However, this advice apparently contains a covert reflection on their inability to be helped by mental influence. Fourth: On account of the learning and practical life of the editor, the most dignified authority on current theory and practice of mental healing is a monthly periodical called *The Higher Law*. For the last year or two its pages have shown more and more acknowledgment of the physical factors in disease. It has been stated there that mental healers are specialists, that the whole truth lies deeper than mental healers have sounded. It is explicitly proposed that believers in the allness of the mind should study physiology, and so get a look at things from a new standpoint. "If a mind-curer helps you, well and good. But do not hesitate to learn from the best doctor at hand." Whether it involves hypocrisy and insincerity, or whether it is accomplished by honest steadying of the reasoning powers, it seems by all these signs that the light of common sense is sure sooner or later to break through any cloud of fanatic prejudice or wilful ignorance which may be raised in these days when so many of the real facts about disease can be readily known.—*Jour. A. M. A.*

TRIALS OF AN EDITOR.—It is said that an editor once received two inquiries from subscribers, one on "How to raise twins successfully," and the other on the best means of destroying grasshoppers. As ill luck would have it, the answers were put into the wrong envelopes, so that the lady with twins was horrified at receiving the advice to "cover them carefully with straw and set fire to it, and the little pests, after jumping in the flames a few minutes, will be speedily settled." The gentleman who was plagued by grasshoppers was told to "give them castor-oil and rub their gums with a bone." It is scarcely necessary to say that the editor lost two subscribers.

INTESTINAL INDIGESTION.—I have been prescribing Seng in a number of cases of stomach and intestinal indigestion, and find the patients wonderfully improved. I think it is a great remedy for all cases of catarrhal indigestion, and it affords me pleasure to testify to the merits of this valuable preparation.

H. G. STROUSE, M. D.

Randolph, Kan.



# HEAT CANNOT BURN

out the vitality of the  
Summer invalid fortified by

## GRAY'S Glycerine TONIC Comp.

It is the ideal hot weather remedy for  
physical depression, disturbed stomachs,  
malnutrition, nervous exhaustion and  
sufferers from chronic organic disease.

THE PURDUE FREDERICK CO.,  
No. 15 Murray Street, New York.

## WHAT ARE YOU PRESCRIBING

The necessity of a proper diagnosis in all  
cases is acknowledged and the remedy you prescribe  
is of equal importance. In the treatment of Di-  
seases of Women such as

LEUCORRHEA, ENDOMETRITIS,  
VAGINITIS, GONORRHEA, Etc.

### Micajah's Medicated Uterine Wafers

have gained a most enviable reputation and afford  
prompt relief if the genuine wafers are used.

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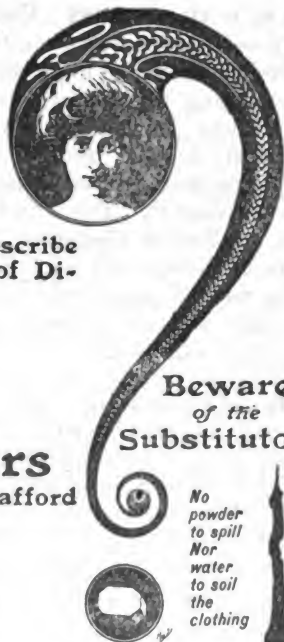
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**Sig:** Insert one Micajah Wafer into the vaginal canal, up to the Uterus,  
every third night, preceded by copious injections of HOT water.

*Samples and Literature by mail gratis*

**MICAJAH & CO., WARREN, PA.**



Beware  
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No  
powder  
to spill  
Nor  
water  
to soil  
the  
clothing

No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.

Was called to see Mary P., aged 8, July 4th, 1900. Family history tubercular. Pulse 102. Temperature 100° F. Diarrhoea, vomiting, pain, tenderness and tumefaction over small intestines. Dilatation of pupils. Loss of appetite, flesh and strength. Night sweats. Other organs healthy. History of recurring attacks every two months for past three years. Gave Glyco-Thymoline, one drachm in four ounces of water, every four hours and high rectal injections in knee breast position of one ounce of Glyco-Thymoline in a quart of warm water every eight hours, having patient retain as much as possible. Diarrhoea and vomiting controlled in 36 hours. Convalescence uneventful. Continued Glyco-Thymoline in 30 m. doses three times a day for three weeks, when further medication was considered unnecessary. Prescribed an easily assimilated diet, rest in the open air and cool sponging of abdomen daily. No return of symptoms to date, May 28, 1902.

**MEANS OF IDENTIFICATION.**—"Are these your clothes or mine?" asked the athletic man of his wife.

"Look in the hip-pocket," was the reply. "If it's smelling-salts they're mine; if it's brandy they're yours."

**ANTIDOTE AGAINST CORROSIVE SUBLIMATE.**—It was stated some time ago that M. Saddei had detected in gluten the property of decomposing the deutochlorate of mercury. An Italian journal records the efficacy of this antidote. A medical pupil swallowed seven grains of corrosive sublimate, believing it to be calomel. The effects of the poison soon manifested themselves. The emulsive power of gluten was administered according to the method suggested by M. Saddei; the sublimate was decomposed, and evacuated by vomiting.—*Lancet*.

**Daniel's Conc. Tinct. Passiflora Incarnata** not only relieves "after pains" speedily, but it acts also as a mild laxative and diuretic and it is therefore an ideal remedy in this condition. When once a physician has given this remedy a thorough trial he will never revert again to morphine, camphor or any of the old-time injurious drugs—*Wm. A. Donovan, M. D.*

**A SUBSCRIBER'S OPINION.**—Editor Hunchville *Enterprize*—I jes been reading in the *Enterprize* thet a medical man seys melaria cums from the bite of a femail muskeeto.

I want to ast ye if ye ever heard of enny trubble thet they wunt a femail at bottum of

it. Sence the days of 'at air woman Eve the femail hes ben tryin fer to set the wurd cross-ways. Ile bet a doller agin a donut thet my rumatiz cum from the bite of a pesky femail fly. Ile bet if these medical men pry aroun fer the fax they kin show thet nobody'd have yaller-janders, crick in the back, er cowbunkles er nothin if we culd jes ketch all the femail inseks and shet 'em up sommers an keep em there.

I haint no use fer femails in enny form an I don't keer who nose it. Yours truly,

BILL BEEBE, bachelor.

Hunchville, O.

—Judge.

Angier's Petroleum Emulsion is the original and the first petroleum placed before the medical profession. Angier's Petroleum Emulsion is today prescribed by leading physicians of this country and Europe and its value in therapeutics is thoroughly established.

#### Chloretone in Minor Operations.

A lady whom I had been treating for some time, while convalescent, complained of a severe pain and soreness under the left arm. Upon examination I found a small swelling and extreme tenderness on pressure. I injected a solution of Chloretone hypodermatically, and also applied some locally on absorbent cotton, continuing the application for twelve or fifteen minutes. I then made a free incision, causing but the slightest pain, as the lady said, and found a quantity of pus. The wound healed beautifully.—*M. Hatcher, M. D., St. Louis, Mo.*

#### What's in a Name?

It is too bad to see a girl dress a really pretty name in the habiliments of an organ grinder's monkey and then labor under the impression that it is pretty. Why can't "Jessica" and "Mae" be content to be simply "Jessie" and "May"?

Oh, Jessica,

Bessica,

Now do confessica;

Don't you believe you're a little too gae?

Tessica,

Tressica,

Truly I guessica

We'll be insane if you go on this wae!

Wear, if you wish, a dead crow on your hat;  
Paint your cheeks red and we'll stand even that;  
Burn your hair stiff and wear corsets; but do  
Spare the sweet name that your mother gave you!

Jessica,

Mae,

Bessica,

Sae—

Ring off!

—*San Francisco Bulletin.*

Preparation—Par Excellence

**“ Fellows’**

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**Syrup of Hypophosphites”**

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Hypophosphites of

Iron,

Lime,

Quinine,

Manganese,

Strychnine,

Potash.

Each fluid drachm contains Hypophosphite of Strychnine equal to 1-64th grain of pure Strychnine.

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**Offers Special Advantages**

in Anaemia, Bronchitis, Phthisis, Influenza, Neurasthenia, and during Convalescence after exhausting diseases.

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*Dr. Milner Fothergill wrote:* “It (Fellows’ Hypophosphites) is a good all-round tonic, specially indicated where there is NERVOUS EXHAUSTION.”

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***SPECIAL NOTE.***—Fellows’ Hypophosphites is *Never sold in Bulk*, and is advertised only to the Medical Profession. Physicians are cautioned against worthless substitutes.

Medical letters may be addressed to

MR. FELLOWS, 26 Christopher St., New York.

LITERATURE OF VALUE UPON APPLICATION.

No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.

**A NAVAL (NAVEL?) COMPARISON.**—This editor had a Sampson-Schley episode recently. At the beginning of a certain pregnancy he was engaged for the ultimate issue. As is his wont, he ministered to the needs of the patient during all these months. A week before the date set she was suddenly taken with labor pains and in the absence of this writer was confined by a brother physician, who was walking out of the house when we arrived. Who, then, confined that woman? But we two settled the matter by adjusting the fee to the satisfaction of both. Under the peculiar ruling of the Court of Claims we, having planned the campaign and arranged for the coming of the stranger-baby, were entitled to the whole fee, though at the moment of engagement the other doctor was there and attended to the confinement.—*The American Physician*.

#### Typical Case of Marasmus.

A baby about five months old had been given up by two physicians. Panopepton was ordered, fifteen drops every hour or two in water, then twenty, twenty-five and thirty drops, and up to a teaspoonful; after a time was given clear, and the quantity increased to two teaspoonfuls at a time. Panopepton agreed from the first and was the sole food for two and a half months. The baby made a rapid recovery.

**ONE HUNDRED PER CENT.**—A Joplin, Mo., paper says that a female Sam Jones is stirring up the people at that place, and that recently she stopped in the middle of a sermon, and picking up a Bible, said:

"There is a man in this house who is unfaithful to his wife! I am going to throw this Bible at him."

She raised the book as if she was going to throw it, and every man in the house but one dodged his head to avoid the missile. Then the evangelist lambasted the dodgers and lauded the one true man. It was afterward learned that he was deaf and dumb.

#### Grains of Wisdom.

The morality of clean blood ought to be one of the first lessons taught us by our pastors and masters. The physical is the substratum of the spiritual, and this fact ought to give the food we eat and the air we breathe a transcendental significance. In recommending this proper care of the physical organism, it will not be supposed that I mean the stuffing or pampering of the body. The shortening of the supplies or a good monkish fast at intervals is often the best discipline for it.—*Tyndall*.

A physician in Kansas City writes: *John B. Daniel, Esq., Atlanta, Ga.*

DEAR SIR:—I may be somewhat slow in reporting my experience with *Passiflora Incarnata* (your Concentrated Tincture), as I had promised to do, but I desire to be absolutely certain before putting my name to any kind of recommendation. Having used it now for several months, in my own and several other cases of insomnia, and after surgical operations in nervous patients (women in particular), and in painful menstruation, I am prepared to say that I know of nothing within the whole range of the *materia medica* which equals it. As a hypnotic, which does the work effectually, and leaves no ill after-effects, I know of nothing like it.

**MODERN HYMNOLOGY.**—The story is going the rounds that a minister down in Missouri found his people too poor to purchase hymn books, and being offered the same book free by a patent medicine house, provided they be allowed to insert their advertisement, ordered three dozen for the congregation. He was elated upon receiving them to find no "ad" in them. The next Sunday he distributed the books, telling the brethren his good fortune, and requested that they sing one hundred and twenty. His chagrin may be imagined when they sang the hymn as follows: "Hark, the heavenly angels sing: Johnson's pills are just the thing; angelic voices, meek and mild, two for a man and one for a child."

**LEARNED TO RELY UPON THEM.**—It gives me pleasure to state that I gave both Peacock's Bromides and Chionia a fair and impartial trial, and have never been disappointed in them in a single instance. I use and prescribe them constantly, and have learned to rely upon them. I always specify Peacock's, so as to be sure of getting what I want. S. B. LITTLE, M. D.

Five Forks, Ga.

**RUBBER-NECK.**—A recent newspaper account of an operation performed under the anesthetic influence of hypnotism relates that the "patient was an interested spectator," and watched the "warm blood spurt under the surgeon's knife!" As the operation in question was a curettment of the uterus, it would be exceedingly interesting to know just how the lady managed to see all this. Even the proverbial curiosity of the sex would find it difficult, we should think, to overcome anatomical difficulties in the way of observation which might appal even a "rubber woman."—*Med. Standard*.

# Journal of Medicine and Science.

ISSUED ON THE TENTH OF EACH MONTH.

In the Interests of Public Health, and in order that the People of Maine may reap the great Benefits, both hygienic and economic, assured by a judicious Application of the Principles of Preventive Medicine, this Journal supports the following Propositions and urges Physicians and Laymen to work diligently to further their Consummation.

- 1st. The Establishment of a Sanatorium for the Treatment of the Consumptive Poor.
- 2nd. The Abolishment of the Coroner System and the Appointment of Medical Examiners.
- 3rd. The daily Inspection of School Children by School Physicians.
- 4th. The more liberal Endowment of our Medical Schools by private Charity, and the voting of larger Appropriations to our State and Local Boards of Health.
- 5th. The Establishment of a State Bacteriologic Laboratory.

For, surely, health is the prime essential to success in life, and the health of the people is the foundation upon which all their happiness and all their power depends.

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## Original Articles.

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### The Requirements of a Surgeon.

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By W. P. GIDDINGS, M. D., of Gardiner, Me.

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**I**N EVERY business in life there are certain well recognized essentials to make it a success. Such requirements are as necessary in any of the professions as in commercial or other enterprises. The importance of a business of whatever kind is measured by its results, and the effect it has upon all parties having an interest in the procedures. In none are the results of greater moment than in the practice of medicine and surgery. And these, though spoken of separately, are so intimately associated that at some point every surgical case touches sides with medicine, hence is of equal interest and importance. While we shall deal in this article largely with the surgical aspect of cases, we shall inferentially include the medical side that immediately enters once the surgical procedures are completed.

We preface this with an axiomatic truth to which a tacit, if not a verbal, admission is made, which is, that surgery has a greater charm for the average medical student and young practitioner than medicine proper. There is a glamour to surgery that awakens aspirations that tempt a host of young men,

regardless of natural or acquired fitness, to enter the field, when a contingent of victims are sacrificed before ambition becomes satisfied or a single competent man is evolved from the mass who is justified in continuing his work as a surgeon. It may be argued that the world's progress is always made through the disaster of experiment, and it is only by the test of ability that excellence or perfection is attained. It seems to the writer that a few less experimenters would reduce the grievous mistakes that are unquestionably multiplying to an alarming extent. If the primaries of surgery were taught more forcibly—that is, the personal requirements necessary in each individual, independent of those obtained from the teacher and textbook—such instruction might serve as a deterrent to some who would have sense enough to recognize their limitations, and remain content to do good work in the still broader field of medicine. I believe it is often the case that a good physician is spoiled in an attempt to make a blundering surgeon. While it is true that the laity have a higher appreciation of surgery than they can have of medicine, yet the profession recognizes that it requires a better cast of mind and larger mental powers to attain an excellence in medicine than it does in surgery. The reasons why are so obvious that no argument becomes necessary. It is now recognized that the better a surgeon

knows medicine, in both its restricted and general sense, the greater his efficiency in surgery proper, since the patient's convalescence is surer and more rapid when medication, which is almost inevitably required, is based on the physiological and pathological requirements. No man, be he physician or surgeon, can have an intelligent appreciation of disease who does not know human anatomy, and while it is imperative that a surgeon should be an anatomist, it is hardly less essential that the medical man should be equally familiar with the component elements and organs of the body. The new pathology has the same important bearing in either branch, and bacteriology plays its rôle, whether a given case be medical or surgical.

In surgery, histology has more interest because of its greater importance in the morbid growths that may pervade any part of the body, its elements determining the prognosis and indicating the proper course of treatment. The conditions of success are many and complex in every walk of life, but none more so than those waiting on surgery. The normal temperament of the individual should by nature be adjusted to a harmonious relation with what may be aptly called surgical environment, so that in the rapid evolution that occurs under American methods and manners he may attain his best in early life and thus give to the world his best before age dims the eye and the hand trembles along his line of incision. The requirements, beyond a natural aptitude, are: First, a thorough surgical training, that includes, besides the studies demanded of every medical student, a supplementary course in anatomy, to be gained only by dissections and operations, many times rehearsed on the cadaver. Second, trained observation, that enables one to see quickly the conditions, so far as one can perceive by gross sight. Third, a judgment founded on all the experience to be gathered from association with trained minds, extensive study of all surgical requirements, and a familiarity with all the modern methods that aid in diagnostic skill. Fourth, a surgeon should be both a mechanic and an artist, for, unless he has something of these natural faculties, his work is found to be faulty in primary planning and irregular and unsightly in execution. There are other elements a surgeon should possess that are almost paramount to all others, chief of which is sufficient of that quality beyond value, a conscience that considers only the highest good of the unfortunate one who stands in need of the *best* skill and tenderest human sympathy. These are the basic re-

quirements to which should be added "an infinite capacity to work."

The immunity afforded by anæsthetics, asepsis, and antiseptics has encouraged a host of novices to enter the field advertising themselves as surgeons, who are as unfitted to act in that rôle as the ghost of Paré would be to enter our modern surgical amphitheatres and operate in his funeral shroud. Neither by nature or acquirement do they have the slightest claim to undertake the very serious service they assume to honor and signally disgrace. I do not mean by this severe stricture to impugn the motives of the majority of these men, desiring to better their own condition in life by seeking to better the imaginary condition of others. I might call these cases of mistaken identity; that is, they do not recognize their own lack of ability. I have seen patients on whom operations have been done, one might say *secundum artem*, and yet the necessity for which no cause could be, or had been, found by most competent surgeons. I have seen and examined many who had been told that not only their future comfort, but their very life, depended upon a severe and radical operation, yet rational medication entirely restored them to a state of comfortable health with their anatomy intact. My experience is not unlike a host of others, as evidenced by verbal communications and by every modern surgical text-book. It is a deplorable, an alarming condition, and it is no wonder the laity are becoming suspicious of the surgeon, or that so many inquire, "Whom or what are we to believe?" I might add many specific cases who fortunately have escaped the knife of ambition or avarice, but time and space forbid. Is it not time greater heed should be given to the requirements and necessities of surgical procedures, and greater conservatism urged in its practice.

Ocean Point, July 6, 1902.

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Gotthiel, in a paper on cancer of the penis, gives the following advice: Warty growths of the genitals, especially in the male, are always to be suspected of malignancy, no matter how benign they appear; such growths should be left entirely alone if they cannot be thoroughly removed by the knife or cautery. Imperfect attempts at removal by use of nitrate of silver, carbolic acid, etc., are to be especially avoided, because many cases are on record in which such irritants stimulated a mere wart into a malignant cancer.

## Therapeutic Suggestions.

Recent investigations by Musser, Seiler and others seem to uphold Dr. Sternberg's claim that Hodgkin's Disease is probably a form of tuberculosis, though in several of the cases there was no reaction to the tuberculin test.

Brieger has reported excellent results from the treatment of sciatica by means of hot water baths or packs and massage.

Tregubow claims that the most valuable treatment of erysipelas is the application of dry heat of sufficient intensity to cause a burn of the first degree. He saturates a cotton ball with alcohol, ignites it, and by means of a probe passes it within 1 cm. of the affected area until pain is felt. The treatment is repeated two or three times a day, for two days.

Dumesnil says that the most unsightly scars can be removed or greatly lessened by means of electrolysis.

Derby obtains better results in the treatment of progressive atrophy of the optic nerve from the use of subcutaneous injections of strychnin in the temples, in increasing doses. He begins with grain 1-25, and increases this dose daily by 1-100 of a grain, until constitutional effects are noticed, usually about the tenth day. The drug is then discontinued for about ten days and then repeated.

Grandin believes that uremia is a mixed toxemia due to poisons emanating from the kidneys, liver and intestines, and in puerperal cases he considers that the fetus also furnishes a toxin.

For the removal of vegetations from the external genitals salicylic acid is an excellent remedy. Half a drachm should be dissolved in an ounce of acetic acid and applied to parts with a camel's hair brush.

Hare says that the atonic stomach of drunkards is much improved by a pill made up as follows:

Oleoresinae capsici,	m x.
Olei caryophylli,	m x.
hydrargyri chloridi mitis,	gr. xx.
Aloes socotrinae,	gr. xl.
Ft. pil. xx. S.: One t. i. d.	

In ingrowing toenail, with granulations, a piece of twisted absorbent cotton soaked in a strong alum solution and inserted under the edge of the nail is a valuable remedy.

In acute laryngitis full doses of sodium bromide should be given, and an embrocation of oil of amber one part to olive oil three parts should be rubbed in thoroughly over the larynx.

In chronic catarrh of the bladder, when the urine is loaded with phosphates, benzoate of ammonium, in doses of 10 to 30 grains, is a useful remedy to render the urine acid.

DaCosta says that iodide of ammonium is a reliable remedy in rheumatism, but it must be given in large doses—60 to 80 grains a day—well diluted.

In fetid bronchitis the patient should inhale constantly the fumes of nascent chloride of ammonium. Place a soup plate containing 3 ounces of sulphuric acid on the floor of the room. Into a saucer placed near pour 2 ounces of strong ammonia. When a tablespoonful of common salt is sprinkled upon the acid, the room is filled with dense fumes of chloride of ammonia. This is also a valuable procedure in the treatment of chronic bronchitis.

In hepatic cirrhosis and jaundice Bartholow places great reliance on phosphate of sodium, but he gives it in large doses of 20 grains to 2 drachms once, twice or thrice a day, according to the laxative effect desired.

Many physicians have reported that urotropin is a valuable remedy in ammoniacal cystitis in which the urine is strongly alkaline, loaded with urates and phosphates and purulent. The ordinary dose is 3 to 7 grains.

The indications for blood letting are states of the circulatory apparatus denoting high arterial tension and excitement and weakness; low tension and circulatory depression are contraindications. In pneumonia, pleurisy and meningitis of the sthenic type, and in apoplexy, it is a useful procedure.

In the nervous disorders common at the menopause the bromides should be combined with valerianate of ammonium and given in moderate doses.

In attacks of angina pectoris, if accompanied by high arterial tension, nitrate of amyl is a quick and reliable remedy. Crush a pearl on a handkerchief and inhale a few whiffs.

In keloid, lupus and scars thiosinamine has proved a valuable remedy. In keloid a 10 per cent. solution in absolute alcohol is injected directly into the growth. Several



cases have also been reported in which it proved of value in opacities of the cornea.

In the epilepsy of children the fluid extract of *solanums Carolinense* has been reported a valuable remedy, reducing the number of fits and their severity.

In gastric ulcer nitrate of silver, combined with hyoscyamus or opium and given in pill form, is the best remedy.

Hare thinks that physostigma is a valuable drug in atony of the bladder or intestines and in catarrh of the bowels; also in gastric and intestinal dilation when it is combined with *nux vomica*.

Ringer is authority for the statement that a lotion of dilute nitric acid, 1-2 to 1 drachm to a pint of water, is of service in bleeding piles. It arrests the hemorrhage, constricts the parts and relieves the sensation of weight and fulness, often distressing symptoms.

In the chronic gastrointestinal catarrh of drunkards *hydrastis* is a valuable remedy.

In irritable coughs due to tickling in the throat and bronchi, dilute hydrocyanic acid combined with syrup of *prunus Virginiana* is very efficient.

Codeine sometimes fails to diminish the glycosuria of diabetes, but it is so often successful that it always should be tried. It is necessary to give it in full doses, beginning with 1 or 2 grains and rapidly increasing.

Many reports maintain that severe neuralgic headache is curable by small daily doses of castor oil. It probably acts by reducing the toxemia which causes the nervous irritation.

In the subacute gastric catarrh of careless eaters, who suffer much from the belching of gas, the following formula is useful.

R	<i>Oleoresinae capsici,</i>	gtt x.
	<i>Pancreatin,</i>	gr. xx.
	<i>Pulv. zingiberis,</i>	gr. xl.
	<i>Pulv. carbonis ligni,</i>	gr. xl.

Ft., 20 pills. S.: One t. i. d.

Ringer says that in biliousness if the stools are dark podophyllin is the best remedy, but if the stools are light calomel should be given.

From reports by Remington and Squibb it seems to be well established that acetic acid is superior to alcohol as a means of extracting certain drugs. Both the solid and fluid extracts digested with acetic acid are strong and uniform; they mix readily with water without a precipitation, and they have a very agreeable, slightly acid taste when

mixed with syrups. It is also said that the salts formed by the union of the active principles and the acid are incompatible with very few drugs usually found in prescriptions, and best of all this process much cheapens the price of the extracts.

Eight or ten drops each of tincture of *cannabis indica* and *nux vomica*, in an ounce of chloroform water, will often produce a "voracious" appetite.

Laryngeal growths are present in about fifty per cent. of throat diseases, and a large number of them may be traced to syphilis, and satisfactorily combated by specific treatment, locally and constitutionally. When the history is suspicious or obscure, such treatment will usually be in order.

When purpuric spots come and go on the abdomen or lower extremities, without assignable cause, or other symptoms indicative of purpura proper, ascertain if the patient is addicted to the use of chloral.

A cold bath, or ice-cold bath, rapidly reduces the temperature, as a rule, in hyperpyrexia. When early and effectively applied, it will lower the bodily heat to a dangerous point. Hot milk raises it again very efficiently. The cold bath, thus employed, usually induces refreshing sleep.

Defective nasal breathing in early life is an etiological factor in many ear and throat affections of later life.—*Med. Summary.*

In the epidemic of smallpox which the city of Glasgow had in 1900, the death rate at all ages in vaccinated persons was 9.1 per cent., in unvaccinated persons, 51.6 per cent., and in persons doubtfully vaccinated, 54.3 per cent.—*The Sanitary Inspector.*

Bleuler has found that a cocain salve containing 1 per cent. of the drug not only relieves the pain of herpes zoster, but causes very rapid disappearance of the eruption. In certain cases it may be replaced by orthoform, although this does not act as quickly.

Repeated vaccination is an absolute protection against smallpox. In no instance have the employees of the Chicago Health Department contracted the disease. Neither have the policemen who came in contact with smallpox patients. A large number of medical students entered the Isolation Hospital to study the disease, every one of them being vaccinated. Not one contracted the disease. In private families, only the non-vaccinated members contracted smallpox.—DR. HERMAN SPALDING, *Phil. Med. Jour.*

The bad results of vaccination are due to bad management and neglect of the vaccine vesicle. Too often the vesicle is broken by scratching, or accidentally. It presents then a raw absorbing surface exposed to any septic germs, in the air or on the fingers, skin, or clothing of the subject.

Yet of the many thousands who have been vaccinated every year in Connecticut, only two fatal cases have been reported in more than twenty years.

The silly fad of vaccinating on the leg is objectionable. The stirring up of the dust on the floors and pavements and the greater friction of the skirts are ready means of septic inoculation.—*Bul. Conn. Board of Health.*

Kuhn recommends the use of glass building-stones of the type invented by Falconnier in the construction of operating-rooms. These stones were invented in France, but are now made in Germany. They are hollow, like glass boxes, are filled with rarefied air, and may be used like bricks. They vary in shape. Some are dice-shaped, others resemble bricks, others are hexagonal. They are joined together by means of a special mortar, the corners being filled out by half or quarter stones furnished by the factory. Trimming of the stone is, of course, out of the question. At the author's suggestion, an operating room was constructed at the Elizabeth Hospital of the Sisters of Mercy in Cassel. The anterior third of the operating room, excepting a low, massive base, was constructed of these stones. There are no windows excepting those above. The walls are air-tight, keep out the heat as well as the cold; vapor is not deposited upon them. They permit the entrance of the daylight and possess at the same time the property of diffusing the direct light of the sun. They also act somewhat like mirrors and reflect the light towards the inner part of the room. Despite the fact that they allow light to pass through, they are not transparent, and no one on the outside can see what is going on within. The walls may be readily washed and kept aseptic. There are two valves in the room for purposes of ventilation.

**ULCERS.**—Indolent ulcers, even when painful and due to varicose veins, may be made to cicatrize comfortably if dusted daily with antipyrin and boric acid (1 to 3).—*Ex.*

**OPIUM NARCOSIS.**—In opium narcosis first empty the stomach with stomach tube to prevent further absorption; then give a cup of strong, hot coffee. The latter allays nausea and acts as a physiological antidote.

Keep the patient aroused by walking and the application of water, and give atropine sulphate, gr. 1-50, and strychnine sulphate, gr. 1-80, hypodermatically.—*PETERSON, Med. Rec.*

**NEURASTHENIA.**—Rest, regulated diet and exercise are indicated; bathing is of great value, as increasing elimination and for its tonic effect upon the nervous system. The salts of lithia are of service; Vichy or Hunyadi water may be used in some cases. Of tonics, the phosphorus containing compounds are our main stays. Strychnine is of value, but must be used with care. Suggestion and psychotherapy often accomplish a great deal. Morphine should not be used.—*ROBERTS, Phila. Med. Jour.*

**EPISTAXIS.**—The older methods of treatment for this condition, while ordinarily reasonably positive and satisfactory, must give way to the newer method of the employment of the extract of the suprarenal gland. Not only is the application of this solution followed by almost instantaneous blanching of the mucous membrane and stoppage of the hemorrhage, but it has a very wide range of effect. Except in aged persons, with a cardiopathic condition causing the epistaxis, the method is universally applicable and valuable.—*The Clinical Review.*

**SQUARE SOUNDS IN STRICTURE OF THE DEEP URETHRA.**—Dr. Hal C. Wyman, of Detroit, employs sounds made square (slightly grooved between the angles for carrying a lubricant), in the treatment of deep strictures, and says that they have given him great satisfaction. He has them made of copper, of the varying sizes of the American scale, and coated by first dipping them in metallic mercury and then rubbing them until they are highly polished. The principle upon which they are employed is that of the wedge.—*International Journal of Surgery*, June, 1891.

**COCOANUT A REMEDY FOR TAPEWORM.**—Dr. Charles E. Denhard, of New York, says: "I have seen some good results from the use of cocoanut for tapeworm. Sixteen years ago Mr. H— came to me for treatment of tænia, which was only partially successful. Five months later he came to my office with two tæniae (two heads and all), which were expelled as a result of eating for two days nothing but cocoanut. I have since seen several cases of successful expulsion after the same treatment, but it is by no means always efficacious. Ethereal fluid extract of male fern (Merck's) takes the first rank, but

it must be given in large doses (not less than 3 iij. or 3 iv.), of course one such dose only."

**A DISORDERED CONDITION OF THE PRIMÆ VIÆ.**—Dr. J. M. Hays, of Oxford, N. C., writes: "A furred tongue—large and flabby, with a bluish cast—anorexia, constipation, perhaps alternating with diarrhoea, slight headache, general lassitude, sleeplessness, loss of interest in business and pleasure. Do you see such cases? Give them

B Podophyllin, gr. x  
Tinct. nux. vom., ʒ j.

M. Sig.: Shake and take from five to eight drops in a little water before each meal.

You will be pleased with the results. Use this also where nitromuriatic acid seems indicated, but fails to produce the desired result. After an experience of several years with this prescription I can recommend it with confidence."

**NORMAL SALT SOLUTION.**—Himmelsbach, in *N. W. Lancet*, recommends, as a matter of great importance, relatively small and repeated injections of the normal salt solution subcutaneously. The quantities formerly given in this manner, from one to three pints, are entirely unnecessary, and according to his statement an equally specific effect can be produced upon the renal organs when the solution is given in smaller amounts, as shown by the elimination which is many times greater than the quantity injected. This has the advantage that the time taken to do the operation is curtailed, which is of great importance in children. Lenhartz advocates injections subcutaneously of two to six ounces every three or four hours, and states that they have a better diuretic effect and cause less strain on the kidneys than a pint given several times a day.—*Medical Review*.

**FRACTURE OF THE HEAD OF THE HUMERUS DUE TO MUSCULAR ACTION.**—M. Auguste Pollosson has reported the result of his examination of two specimens taken from the body of an epileptic who died during a convulsion, and who had suffered no traumatism of any description. The upper articulating extremity of the humerus on each side presented lesions which, seen externally, were absolutely alike and symmetrically situated. These lesions consisted in a forcing in of the cartilaginous part of the humeral heads. The depression was found over the anterior part of the head near the border of the cartilage, immediately above the lesser trochanter; it had the appearance of a groove from two and a half to three centimetres long, and from five to six millimetres deep.

The cartilage was bent toward the hollow of this groove, and presented near the deepest part a fissured line of fracture. A perpendicular section at the seat of the depression showed similar appearances. The laminae of compact tissue beneath the cartilage presented the same curve and the same fracture. The lamellæ of the spongy tissue were broken and the spaces were infiltrated with black blood, evidently proceeding from an interosseous hemorrhage, and not from a congestive or inflammatory state. The lesions were similar on both sides. On the left humerus, beneath the inferior or lower edge of the groove, there was found a movable bony fragment of about a centimetre in diameter, surrounded with a bloody effusion. The bones were not diseased nor preternaturally brittle. The absence of traumatism, the symmetry of the lesions, and the evidences of hemorrhagic infiltration of all the shoulder muscles evidencing a spasm of great violence, were sufficient to explain the occurrence of this very rare accident.—*American Journal of the Medical Sciences*.

**ACUTE YELLOW ATROPHY OF THE LIVER AND PHOSPHORUS POISONING.**—Dr. Poore believes that all cases of acute yellow atrophy of the liver are due to phosphorus poisoning. Since the recognition of the marked changes occurring in the liver from taking phosphorus in over-doses, the cases of so-called acute yellow atrophy reported have been very few. If there is a true idiopathic acute yellow atrophy, it is clinically indistinguishable from phosphorus poisoning.—*The Lancet*.

**TERTIARY SYPHILIS.**—Prof. Fournier, in a recent lecture at the Hôpital Saint-Louis, related his results of the analysis of 5,790 cases of tertiary syphilis, and demonstrated that of all the tissues of the body the most frequently invaded, the nervous system (including the brain) headed the list with 1,851. Next to this comes the skin, with 1,418. The most startling particulars in the table were 758 cases of cerebral syphilis and 628 cases of tabes.

#### Uses for Salt.

Salt puts out fire in the chimney.

Salt in the oven under baking tins will prevent their scorching on the bottom.

Salt and vinegar will remove stains from discolored teacups.

Salt thrown on soot which has fallen on the carpet will prevent stain.

Salt put on ink when freshly spilled on a carpet will help in removing the spot.

Salt and soda are excellent for bee stings.

Salt in whitewash makes it stick.

Salt thrown on a coal fire which is low will revive it.

Salt used in sweeping carpets keeps out moths.

#### Urotropin in Genitourinary Diseases.

Thompson (*Boston Medical and Surgical Journal*, November 4, 1899,) summarizes his conclusions concerning the therapeutic action of urotropin as follows: (1.) A urinary sterilizer, antiseptic and acidifier—prompt and reliable in action,—moderate in dose, which, if adhered to, renders it both non-toxic and non-irritating to all parts of the animal economy. (2.) In virtue of its peculiar affinity for the urine, into which it passes unchanged, and where it parts with formaldehyd, it is apparent that its action in genitourinary lesions is likely to be complete and certain. (3.) Its decisive and lasting effect, and especially its comparative singleness of action—which last is a most desirable property—should give it a place in the list of medicinal specifics. (4.) From the observations reported thus far, urotropin has appeared to be most frequently indicated in chronic disease, where it has produced exceptionally good results. (5.) In the writer's personal experience the diuretic action of the drug was not marked enough to render it deserving of claim to such a virtue.

#### Lumbago.

Lumbago, or pain in the back, it is hardly necessary to explain, is a symptom and not a disease. In its ordinary form it is a painful manifestation limited to the muscles of the back, which serve to regain or maintain the erect position, hence it is very apt to follow a strain or effort such as that involved by remaining standing in one position for an unduly long time. Very often the so-called lumbago coincides with, and is probably due to, some functional disturbance of the kidneys; indeed, pain in the back is always an early and prominent symptom of renal congestion. The precise significance of the pain can only be ascertained by further examination and observation. The rheumatic form of lumbago is a very distressing and obstinate affection, but, except for the irksome disability which it entails, has not much importance. That due to the kidneys, on the other hand, may pass off as suddenly as it has come, or it may prove to be the prelude of graver trouble, according to the degree to which the renal functions are disturbed.—*Medical Press and Circular*.

#### The Viewpoint in Medicine.

If asked such questions as "How are you getting along?" "How is everything?" "How does the world use you?" nine out of ten will reply in a way going to show that in calculating the degree of success, dollars and cents is the factor with which we compute our progress. Such answers as "I find plenty of opportunity to do good," "Nothing delights me more than the practice of my profession," are rarely heard. "Business is bad," or "Business is good," or "Collections are slow," or "Collections are brisk," are the replies most likely to be received, not only in commercial life, but in professional as well. It is said that we get what we want in this world. If money be the chief object for which we strive, its accumulation will be the *summum bonum* of life; if something else—professional honor, scientific investigation, public beneficence—these, too, may be realized. Is it not often true with many of us that what we are hoping to make is secondary only to what we fear we may lose? As professional men—physicians—do we not find ourselves reckoning, too often perhaps, financial gain rather than fraternal good? The sum of our success cannot always be told in figures. When the steward comes to give an account of his stewardship, success will not depend altogether upon the multiplication of the one or the two or the five talents, as the case may be, but rather upon the uses to which they have been put. It may be asked, "Are we not entitled to pecuniary reward?" Certainly. But viewed from the higher plane it must ever be incidental and subservient. Our mission is to heal. More than seven centuries ago, Maimonides, one of the greatest physicians of the Middle Ages, offered the following prayer: "May the love of my art actuate me at all times; may neither avarice, nor miserliness, nor the thirst for glory or a great reputation engage my mind; for, enemies of truth and philanthropy, they could easily deceive me and make me forgetful of my lofty aim of doing good to Thy children. Endow me with strength of heart and mind, so that both may be always ready to serve the rich and the poor, the good and the wicked, friend and enemy, and that I may never see in the patient anything else but a fellow-creature in pain." A better motto has never been formulated than the one of Esculapius Hippocrates and Aristotle—one that should ever influence the physician in the unselfishness of his chosen calling—"Not for ourselves alone."—*St. Paul Medical Journal*.

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PORTLAND, MAINE, OCTOBER, 1902.

## Editorial.

### Keep Up the Good Work.

There are at least two good reasons why a majority of the people of Maine insist at the present time upon the enforcement of the prohibitory law. First. The prohibitory law is a part of the constitution of the state, voted so after a referendum to the people. Being a law of the state it should be enforced, lest all law come into disrepute, and contempt take the place of respect for law. Whatever may be said by that class of politicians (whose chief aim in life is securing the loaves and fishes,) to the effect that the law against liquor selling is enforced, even in times of the greatest laxity, as well as the law against larceny, murder and other crimes, yet the fact remains that the liquor seller has a fixed place of business in the community, and if sought he can be detected plying his unlawful trade; and furthermore, we, for the past two years, have had an object lesson ever before us, showing what an honest, earnest sheriff can do towards enforcing the prohibitory law. The late sheriff of Cumberland County, however great may have been the difficulties to be overcome, has proved conclusively that faithful, zealous officials can enforce this law so as to drive the unlawful traffic out of business, and so as to bring law

into that general respect which non-enforcement of a statute always deprives it of.

If bribery, hypocrisy and self-enrichment have been the fruit of the policy of most of the officials who have had the duty of enforcing the prohibitory law, these disgraces are no part of the law itself, but are to be charged to the indifference and inefficiency of the officials themselves. Moreover, there is plenty of law to reach such criminal officials, and the penalties are adequate.

All that can be said in favor of the non-enforcement of any law is that the law is unwise, and in such cases it should be repealed as soon as possible.

The second reason why the people of the state believe that the prohibitory law should be enforced lies in the fact that they have come to believe that at least one-half of the crime, misery and disease in the world are due, either directly or indirectly, to the abuse of alcohol, and that it has been proved in such few instances in which the saloon has been banished from a community that it pays, even in a pecuniary sense.

The city of Quincy, Mass., has for twenty years, largely through the efforts of one man, Mr. Henry Faxon, been free from the evils of the open saloon. During that time it has doubled its population, increased its valuation three fold, and its new residences and its deposits in savings banks has increased more than four fold. It might be said that

there are several other cities within ten miles of Boston that have accomplished a like result within the same time, but there is one peculiar improvement in relation to Quincy, which every other city lacks, and that is, that while the population has doubled, the amount expended by the overseers for the relief of the poor has decreased 12 per cent.

This looks as if prohibition paid. Our experience in Portland has given us some such desirable saving, for the reports of both the county commissioners and the overseers of the poor show that there are less demands on the poor-fund under a strict enforcement, and the facts seem to well uphold the position taken by Secretary Baker to the effect that drunkenness and the abuse of liquor are at the bottom of a large part of the crime and poverty in Portland.

From the standpoint of public health the limiting of acute and chronic alcoholism would add much to the health and happiness of the human family. While most physicians still contend that alcoholic preparations have certain food value, when taken in moderation, as a medicine in the tiding over of the patient in an acute disease, yet this classing of alcohol as a drug found useful in the treatment of certain self-limited diseases is a very different thing from the use of alcohol as a daily beverage or the abuse of it in a periodical spree.

It was not so long ago that an eminent surgeon of New York said in a public address, that if he was to be granted the fulfillment of one wish, his wish would be that alcohol might be banished from the earth. Every practicing physician knows that the direct and ultimate results of both the daily temperate and the intemperate use of alcoholic stimulants is so destructive to the integrity of the nervous system, and so disturbs the interdependent functions of the organs concerned in both anabolism and ketabolism, that the drunkard, even if he escapes the direct consequences of alcoholic poisoning, is so reduced in vigor and normal resisting power that he becomes an easy prey for the disease germ of phthisis, pneumonia, small-pox and many other diseases.

More than this, the evil effects of alcoholism do not stop with the victim himself, but are literally transmitted even unto the third and fourth generation of those that follow him. So widespread are the evils of the abuse of alcohol, and so far reaching are its pernicious results, that, while some things may be said in favor of the use of alcohol in the arts and sciences, yet most physicians know that the eminent surgeon had good reason to wish the

wish he wished, and that nothing would more lighten the work of health officers and our penal officials than the banishment of old John Barleycorn.

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#### Literature in the Home.

The present is the time of year in which the publishing houses are sending out their book catalogues and magazine prospectuses. The question of what sort of reading matter shall enter the home is an important one to every parent in the land, and one which often does not receive the attention which its influence merits.

The public library, while an excellent thing in itself, can never take the place of the home library or the monthly periodicals which are read by every member of the household.

Since these are the days when many periodicals depend entirely upon their advertising pages for their profit, and subscriptions have become of importance only as they are a means to increased advertising patronage, there is a strong temptation for publishers not to be too conscientious as to what advertisements shall be given a place in their magazines. Some of the "ads" accepted and given a place even in some of our religious papers are likely to counteract, in part at least, the good influences of the reading columns.

These things ought not so to be, and not even the necessity of self-preservation should tempt such periodicals to print and circulate some of the advertisements which disgrace their pages. Quackery and debauchery masquerading in the livery of medicine ought not to find such able supporters as some of the so-called religious papers prove to be.

All this tends to prove that the literature that enters the home is an important matter, and one that should receive the earnest and careful attention of parents.

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#### The Actors' Alliance Church.

The church and the stage have each some good things to offer the other, and, since both are likely to remain important factors in our social life, it seems eminently fitting that the efforts of the actors' alliance church to more fully harmonize the differences must be attended with good results.

A large share of the trouble in this world continues because people do not understand each other, and because no effort is made to acquire such knowledge. The church is the great uplifting power in every community,



and there is no doubt but that the stage might be made an important instrument aiding this work.

In these days of hurry, bustle and push, recreation and amusement are absolutely essential to the well-being of a community, and to quite a large degree the morality of a people is influenced by its amusements. Consequently the church and the theatre have been holding each other at arm's length long enough, and we welcome any movement which is likely to result in a better understanding between these important agents for good.

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#### Forest Destruction.

That part of the Holy Land which borders on the Great Sea has become a desolate waste, because its forests furnished most excellent timber for the building of Roman war vessels.

From a land flowing with milk and honey, this garden plot was changed into an uninhabitable desert through the shortsighted, destructive policy of man. The Roman denuded its hills of trees, and the many generations of men who have lived since those days have been powerless to restore the fertility of the soil. This land, now the abomination of desolation, is a conspicuous example of the evil results that follow the wholesale destruction of trees, and also of the inadequacy of any remedy which man is able to apply to cure the evil.

Forests, besides being of those things of beauty which are a joy forever, also serve many utilitarian purposes. They are the great agents in holding back and slowly distributing the rain supply. The leaves and dead branches which cover the ground act as filters through which the moisture slowly percolates into the soil. In lands in which the trees have been entirely removed great floods and great drouths alternate, and both are destructive agents of great power.

Nobody can deny but that man's enterprise in utilizing the forests has been of inestimable benefit to the human family. The logging camps and the pulp mills are important hives of industry, and cheap lumber and cheap books have been strong factors in our progress in civilization.

While this is true, yet there is great danger in carrying these enterprises to the recklessness in which the forests will be destroyed. So apparent has this danger become that at recent meetings the managers of pulp mills have pointed out the dangers and have urged measures tending to ensure a new growth of

trees. All over the land clubs and societies are formed whose members are enthusiastically advocating the planting of trees and the preservation of our forests.

At the present time the daily papers have announced that capitalists have purchased vast tracts of forest in the White Mountain region, and that the work of denuding these hills of trees has already begun. If this great watershed of New England should become bare of trees, or if the forests should be cut off faster than a new growth is provided, it could not fail to be a great misfortune to almost every city and town. Apart from the somewhat sentimental reason which would deplore the substitution of unsightly stumps for the forest primeval, a great pecuniary loss would result to all except those capitalists directly interested in obtaining the lumber.

The coal strike has taught us that great suffering and harm may come to the people of a community so soon as the people have no power in placing a check upon monopolists who claim the right to run their private business as they think fit. In such matters as an unadulterated food supply, an adequate water supply, and cheap fuel every man has an intense and vital interest. "What's mine is mine" is a very excellent doctrine, but it may be carried too far. If the White Mountain watershed should be denuded of its forests, if these trees should be cut down by those who claim to own them, regardless of consequences, a great inheritance of woe would be transmitted to the future generations of New England.

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#### Longevity.

Dr. A. A. Piasetski, a physician of Russia, has just published a book in which he has attempted to prove that Adam and the other scriptural forefathers really did live nearly one thousand years. The *Novage Vremya*, in a review of the book, praises it as being sound, reverent, scholarly and ingenious. The immediate descendants of Adam all lived to be about 900 years old. In the time of Abraham the span of life had dwindled to about 175 years. What is the reason for this decline in longevity? The author rejects entirely the theory that in the antediluvian period our month was called a year, and that, therefore, the average length of life, as now, was about eighty years. He further concludes that the conditions of humanity before the flood were such as to conduce to long years and to permit of the individual life alleged in the Bible. In those days we know



that there were giants and that the animals were of colossal size, as the specimens found buried in the strata abundantly testify.

Starting with such fundamental facts, Dr. Piasetski argues that if the men were giants their constitutions were naturally stronger and their health infinitely better. Further, the climate of Mesopotamia was mild, warm, beneficent, in every way favorable to longevity. The men also led very different lives. They lived in the open air, food was abundant and could be obtained without effort. The trees groaned with the abundance of fruits, the rivers were alive with fish, and the meat of animals was little eaten. The use of fermented liquors was unknown, mental life was in a natural condition and there was no vice, prostitution, or violation of Nature's laws. There were none of the evils resulting from density of population, or from rivalry, worry and the struggle for existence. The nervous system was not overtaxed, and death came only from violence or old age.

With the multiplication of Noah's descendants after the flood, the unproductive lands about Ararat were unable to sustain the inhabitants. A nomadic life became necessary and hunger compelled to dispersion, and these hardships reduced the duration of individual life. With Noah drunkenness was introduced, and therewith violence and disease increased. War also made its appearance in a struggle for desirable lands, and pestilence and famine followed in its wake. Abraham was a slave to polygamy, and the abuse of the sexual function, with its attendant degeneracy and weakness, were still more intensified by the practices of Onan and Juda.

This is all very interesting, and yet there is a lurking suspicion that the doctor has come far from proving his case. Giving all the advantages to the hereditary influences and the environment which they could possibly have possessed, they do not seem to be sufficient to account for the great length of life. Gigantism is not by any means uncommon at the present day, and it is now looked upon as a form of disease, and an evidence of degeneracy rather than of vigorous constitution that would tend to longevity. Anyway, since everybody, whatever they may say in times of despondency, is perfectly willing to die of old age, it might be well if we could be induced to return to something of the purity of life and simplicity of living which prevailed in the times of the patriarchs, but since we, in these days, are supposed to live in deeds rather than years, perhaps it does not very much matter.

### The Control of Hospitals.

The National Association of Hospital Superintendents will meet in Philadelphia, Oct. 14, 15, 16. Meetings have already been held in Cleveland, Pittsburg, and New York, and the present meeting will be attended by representatives of many of the hospitals of the United States and Canada. A large proportion of these officers are graduated physicians, and several questions of vital importance will come up for discussion at the meetings. One of the most important matters relating to hospital management, which probably will receive full consideration, is the question of a fuller medical representation on the board of control of hospitals. No class of workers are more interested or more vitally concerned with the hospitals than physicians. No hospital in the world could run at all if it did not receive the unpaid services of its medical and surgical staff, and for this reason alone they should have a voice in the management of these charitable institutions. Physicians are not behind other business men in executive and administrative ability, and their education and training fit them to be able advisers on many points relating to the management of a hospital. In fact, they bring a knowledge and experience to certain phases of this work which laymen cannot possibly possess. Hospitals would be more successful in their work and management if a physician was put in control as superintendent, and if one or more physicians were elected members and counsellors of the board of trustees.

### The Metric System.

This system of weights and measures is said to be slowly but surely gaining adoption throughout the world. When we recall that our coinage system is based on the decimal plan, and how easy it is to reckon change and make up interest, the wonder is that the metric system is so slow in receiving recognition in America.

All our medical schools in their prospectuses require the prospective student to learn the metric system, but after he becomes a student he hears nothing more about it. Therefore we conclude that the professors in *materia medica* are too lazy to learn the system themselves, or else they consider the metric system an excellent thing in the prospectus but a very poor thing in the school.

### The "Shiga" Bacillus.

The announcement by Drs. Duval and Bassett that, in their opinion, the bacillus dysenteriae is the cause of summer diarrhea of children is of the greatest importance. Their belief is founded upon careful research and is based upon the most trustworthy experiments known to medical science. It is to be hoped that the discovery of the cause of this disease will quickly lead to more scientific and adequate measures for its treatment.

This JOURNAL does not claim to possess political acumen, and yet the trend of the times seems to indicate, even to those who see but through a glass darkly, that if the active managers of the Republican party do not permit the protective tariff to be revised at the hands of its friends, that the people will rise up and allow it to be smashed by the hands of its enemies. Recent events go to prove that the present tariff is not so sacred that it cannot be considered, nor so perfect but that it can easily be improved, and the voters are the final judges of both the proper time and the proper agents for this work.

### Reviews.

THE DISEASES OF INFANCY AND CHILDHOOD FOR THE USE OF STUDENTS AND PRACTITIONERS OF MEDICINE. By L. Emmett Holt, M. D., LL. D. With 225 illustrations, including 9 colored plates. Second edition, revised and enlarged. Published, 1902, by D. Appleton & Co., New York. Price, cloth, \$6.00; half leather, \$6.50.

Those who are familiar with Dr. Holt's well-known work will welcome a new edition, and those unacquainted with it will find it a safe and valuable guide to every-day practice among infants and children. Dr. Holt has had a large experience, both in private practice and in hospitals, and he, too, possesses a clearness of style and simplicity of statement. In this new edition much has been rewritten, numerous additions made, and all carefully revised, so as to insure a comprehensive and timely treatise. Much space is devoted to clinical descriptions and to general and differential diagnosis, and the directions for treatment are clear, simple and concise, telling the reader both what to do and how to do it. The following important subjects are especially fully treated, and the instruction will prove of great value to both students and medical men: The Care and Diseases of the Newly Born Child; Nutrition, its Derangements, and Diseases; The

Acute Diseases of the Lungs and of the Intestinal Tract, and The Specific Infectious Diseases.

The book is judiciously illustrated and is a credit to the art of modern bookmaking, paper, type, plates and binding being all excellent.

A TREATISE ON DISEASES OF THE ANUS, RECTUM AND PELVIC COLON. By James P. Tuttle, A. M., M. D., Professor of Rectal Surgery in the New York Polyclinic Medical School and Hospital; Visiting Surgeon to the Almshouse and Workhouse Hospitals. With 8 colored plates and 338 illustrations. Published, 1902, by D. Appleton & Co., New York. Price, cloth, \$6.00; half leather, \$6.50.

Dr. Tuttle has had ten years' experience as a teacher of rectal diseases and over twenty years' service as a rectal surgeon, and is a recognized authority in this branch of medicine. His text-book is a clear, concise and practical treatise on diseases of the anus, rectum, and pelvic colon, and fully meets the needs of the student, the general practitioner, and the specialist. It embraces the etiology, pathology, symptomatology, diagnosis, and treatment; modern methods of diagnosis are fully described; lines of local treatment are fully indicated, and the accepted surgical methods are exhaustively treated. Much space has been devoted to the examination, diagnosis, and local treatment, because it is of great importance to students and general practitioners to know these things.

The book is profusely and artistically illustrated, and the plates and pictures serve admirably to illumine the text. The publishers have done their part, and the book is well printed and well bound.

PRACTICAL OBSTETRICS, A TEXT-BOOK FOR PRACTITIONERS AND STUDENTS. By Edward Reynolds, M. D., Visiting Surgeon to the Free Hospital for Women; Fellow of the American Gynecological Society, of the Obstetrical Society of Boston, etc.; formerly Instructor in Obstetrics in Harvard University, and Senior Physician to Out-Patients of the Boston Lying-In Hospital; and Franklin S. Newell, M. D., Assistant in Obstetrics and Gynecology in Harvard University; Physician to Out-Patients of the Boston Lying-In Hospital; Assistant Visiting Physician to the Boston City Hospital, in the Department of the Diseases of Women; Fellow of the Obstetrical Society of Boston, etc. Illustrated with 252 engravings and 3 colored plates. Published, 1902, by Lea Brothers & Co., Philadelphia and New York.

This book is based upon a large experience, both in actual bedside experience and in the art of teaching. What will especially commend it to many practitioners is the fact that in every condition requiring the ac-

coucheur's intervention it gives clearly and concisely the method which the authors have found to be most successful, wasting no time in theorizing, nor devoting space to other men's methods.

The subject matter is divided into six parts, as follows: Part I, Pregnancy; Part II, Natural Labor; Part III, Obstetrical Surgery; Part IV, Abnormal Labor; Part V, Pathology of Labor; Part VI, The Puerperium. Each subject is treated in a practical way, and the general practitioner will find the instruction both valuable and easily accessible. In the multitude of books which Americans have given us upon this subject this is one of the most practical and one of the best. The book is richly illustrated and the engravings and plates add to the value of the text.

**LEA'S SERIES OF POCKET TEXT-BOOKS—MATERIA MEDICA, THERAPEUTICS, MEDICAL PHARMACY, PRESCRIPTION WRITING AND MEDICAL LATIN.** A Manual for Students and Practitioners. By William Schleif, Ph. G., M. D., Instructor in Pharmacy in the University of Pennsylvania. Series edited by Bern B. Gallaudet, M. D., Demonstrator of Anatomy and Instructor in Surgery, College of Physicians and Surgeons, New York; Visiting Surgeon, Bellevue Hospital, New York. Second edition, revised and enlarged. Published, 1902, by Lea Brothers & Co., Philadelphia and New York.

That this book has proven of value is evidenced by an early call for a second edition. In a condensed but comprehensive way, it presents the whole field of materia medica, therapeutics, and offering, besides, much information on cognate subjects, such as Dietetics, Therapeutic Index to New Remedies, Table of Doses, Poisons and their Antidotes, Incompatibilities, Classification of Drugs, and a full and complete index.

In addition to the paragraphs covering the Physical Properties, Physiologic Actions, Therapeutics, and Toxicology of each remedial agent, there are chapters treating of Prescription Writing, Medical Latin, Medical Pharmacy, the Metric System, and Practical Anesthesia.

The book is well printed and artistically bound and in every way worthy of a place in the medical man's library.

**A GUIDE TO THE PRACTICAL EXAMINATION OF URINE FOR THE USE OF PHYSICIANS AND STUDENTS.** By James Tyson, M. D. Tenth edition, revised and corrected. With a colored plate and wood engravings. Published, 1902, by P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia. Price, \$1.50 net.

A book of which 25,000 copies have been sold, and which is now in the tenth edition,

must have merit and must have supplied a need. The book as now presented is a reliable and scientific guide to the practical examination of the urine, and contains besides much information in relation to kidney diseases, urinary calculi and other germane subjects.

This, the tenth edition, has been carefully revised and brought up to date, and many additions have been made. The book is well worthy of a place in every physician's library, and the price places it within reach of all.

**BLAKISTON'S QUIZ COMPEND—No. 4, A COMPEND OF HUMAN PHYSIOLOGY ESPECIALLY ADAPTED FOR THE USE OF MEDICAL STUDENTS.** By Albert P. Brubaker, A. M., M. D. Eleventh edition, revised and enlarged. With illustrations and a Table of Physiologic Constants. Published, 1902, by P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia. Price, 80 cents net.

A great many students must have found this compend a valuable aid in study, and students and practitioners will welcome a new edition. This edition has been carefully revised and rewritten, and changes and additions made, so that it now presents in a clear and compact way the essential principles of physiology. The table of physiologic constants gives a large amount of information in a small space. The compend is judiciously illustrated and well printed and bound.

## Correspondence.

BOSTON, MASS., Sept. 4, 1902.

*Editor of the Journal of Medicine and Science, Portland, Me.*

Dear Sir:— In your issue of August you say, "It is well known to the profession that physicians are nowadays often being consulted by Eddyites, even by prominent members of the sect, and that occasionally some of these are to be found in our hospitals." Then you comment further, giving the impression that Christian Scientists are weakening in their faith and are beginning to acknowledge the importance of medicine to them, as well as to those who have not accepted this faith. I presume that in this age, as in all ages, some do not maintain the exalted standard with which they start, but sometimes weaken and give way to practice which is not in strict accord with their faith. Under a stress of circumstances those who are weak in the faith may sometimes yield to the pleas and suggestions of materialism, but this does not argue anything against the teachings of Christian

Science. It only shows the weakness of human nature and how difficult it is to stand the test and to continue in implicit faith in God, the one power. I am sure the writer of the criticism in question did not mean to be discourteous to Christian Scientists in the use of the word "Eddyites," but we respectfully call his attention to the fact that his term is entirely out of place. It is not correct from a lexicographical standpoint, since Christian Science is not an ism of Mrs. Eddy, but has been convincingly proven by its adherents who have made it their very own. Furthermore, the use of this term is offensive to Christian Scientists, and exceedingly discourteous to its founder, and for this reason is epithetical and what school children denominate calling names.

ALFRED FARLOW.

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## Selections.

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### Pathology and Treatment of Pneumonia.

By WM. R. HOWARD, A. B., M. D.

Acute fibrinous pneumonia is a self-limited, specific, infectious disease, of short duration, varied by the predisposing causes, the previous health of the patient, the hygienic environments, and the medical treatment.

With the exhaustion or cessation of growth of the specific micro-organism, the disease subsides. With the cessation of the growth in the stage of engorgement, the disease is aborted; when the fibrinous exudate has begun, the destruction of the parasite, or the cessation of its growth, the exudate ceases, and a rapid convalescence ensues.

Pneumonia is an essential specific fever, as much so as typhoid fever or any of the exanthematous diseases. It is not a true inflammation of lung tissue, but an exudative condition without the destruction of lung tissue beyond the parenchymatous metamorphosis and desquamation of the alveolar and vesicular epithelium. Pneumonia begins with chill and fever, followed almost immediately by well-marked anatomic changes. The first change to occur is a turgescence of the inter-alveolar capillaries of the pulmonary vessels, giving the lung the appearance of a hypostatic pneumonia. The lungs at this time in such parts show very little characteristic change. They are dark-red, still contain air, with a firm resistance. This is the stage of congestion or engorgement and may be subdivided into that of catarrhal and hemorrhagic. The catarrhal condition pre-

sents the cloudy swelling or parenchymatous metamorphosis of the vesicular epithelium, due to the toxic influences of the pathogenic micro-organisms present. This is immediately followed by the hemorrhagic, which is marked by the presence of a bloody serum, mixed with air, giving a reddish, frothy appearance. Immediately following, and almost simultaneously, occurs the stage of red hepatization, in which the air is excluded and the alveoli become filled with fibrin and red blood cells. The greatly extended inter-alveolar capillaries now become less markedly so, the alveoli and air vesicles become solid, while the capillaries contain liquor sanguinis and remain intact.

The lung at this stage is very friable, large, heavy and dark-red, owing to the coagula in the vesicles, and the dark, unaerified blood circulating in the capillaries. The cut surface presents a granular appearance, and under pressure bloody serum escapes, but no air; when scraped with the knife fibrinous plugs freely escape from the air cells and are plainly visible on the blade. The solid exudate filling the air vesicles extends into the bronchioles, and in rare instances reach the bronchi of considerable size. The vesicular and bronchial walls become infiltrated with leucocytes, though rarely with the local leucocytosis and fibrinous exudate which marks a local inflammation of connective tissues, the blood vessels always remaining intact. Within this exudate the pathogenic pneumococcus and other micro-organisms are found. The fragments of the lungs, which, previous to the fibrinous exudate, on account of the presence of air, would float in water, now sink.

Under the microscope, the alveoli are found to be filled with the coagulated exudate, within the meshes of which are entangled red blood discs, leucocytes and desquamated alveolar epithelium; the pneumococci are found in abundance free, and within the protoplasm of the leucocytes and alveolar epithelium. The desquamated epithelium from the alveoli, vesicles and bronchioles, and the red blood cells undergo fragmentation, and the fatty degenerated epithelium lead to a liquefaction of the vesicular coagulum, converting the mass into an emulsion favorable for absorption or expectoration. The color now becomes grayish, or reddish-gray, on account of the loss of the red cells, the cessation of the hyperæmia and the advent of leucocytes. This is called the stage of gray hepatization. The stages of red and gray hepatization are often found in contiguous parts of the same lung. In viewing the

morbid anatomy in this stage, the lung becomes softer and more easily torn, but less liable to break by bending than in the red stage, dependent upon the progress of the liquefaction. Upon squeezing the organ, a free flow of the emulsified inflammatory exudate is observed. The peribronchial glands are enlarged, the pleurisy more advanced, and occasionally lymphatic channels running from the pleura toward the mediastinum are swollen and show yellowish red streaks. Under the microscope no fibrin is present, but leucocytes and the degenerated epithelial cells, showing varying stages of granular and fatty change with more or less serum. Upon dipping a small piece of the lung into strong alcohol or boiling water it becomes firm, by reason of the coagulation of the albuminous constituents of the vesicular contents.

With the advent of the liquefaction of the coagulum—the stage of gray hepatization—begins the process of recovery. As the recovery advances the fibrinous plugs in the bronchioles prevent the air from entering the vesicles, which are now becoming by absorption free from their contents; these fibrinous plugs finally soften, loosen and are absorbed or expectorated, and the air is again permitted to enter into the alveoli.

The inflammatory processes of the air cells do not occur independently of changes in the lung tissue, for the inter-alveolar septa in severe cases are filled with round cells and become oedematous; these cells disappear, being taken away by absorption through the lymphatics. While several micro-organisms are found in the fibrinous exudates of pneumonia, which probably influence to some extent the course and severity of the disease, the pneumo-bacillus of Friedlander and the pneumococcus (*diplococcus lanceolatus capsulatus*) of Frænkel and Weichselbaum are recognized by pathologists as the causing factors of this disease, the latter in about 70% of the cases in the northern and eastern parts of the United States, while in 30 cases analyzed by the writer, with reference to these two forms, only 3 were found in which the bacillus of Friedlander was present, and these in company with Frænkel's pneumococcus; 27 cases in which the pneumococcus alone was found. The early recognition of the pathogenic micro-organisms,—whether Frænkel's pneumococcus or Friedlander's pneumobacillus, or both, are present,—is of great importance in prognosis as well as in treatment. My cases of mixed infection, in which both forms were found, were less influenced by treatment, and resolution was de-

layed beyond the ninth day, two being complicated pleuro-pneumonia.

These micro-organisms are facultative anaerobes, requiring a slightly alkaline medium, Friedlander's growing best in the laboratory, at room temperature 70 F. (22 C.), while Frænkel's at 98 F. (37 C.), or normal body temperature. The latter has a temperature range of from 75 F. to 107 F. High temperatures inhibit their growth. The products of the catarrhal and hemorrhagic prodromes prior to the stage of red hepatization furnish a suitable culture medium for the rapid growth and development of these bacteria. These products being slightly alkaline in reaction, later change to neutral, then to a slightly acid medium, inhibiting and finally destroying the parasite, thus making the disease a self-limited one.

In pneumonia there is always a marked general leucocytosis. The normal count, which is about 11,000 to the cubic millimeter, now rises to about 25,000. Tyson reports a case of 33,000, while Osler has found as high as 63,000 leucocytes to the cubic millimeter. When leucocytosis is not marked or is absent, it is justly regarded as an unfavorable symptom. Stimulation of the blood-producing centers is regarded as the essential cause of general leucocytosis. It is here important to consider briefly the normal vascularization of the lungs. In the pulmonary circulation the blood flows from the right side of the heart through the pulmonary artery to the lungs and is returned to the left side by the pulmonary veins. The bronchial artery, which gives the blood supply to the lung tissue and to the pulmonary vessels, comes from the left side of the heart, arising from the aorta, penetrating the lung at its root, accompanies the bronchi, and is distributed to the walls of the blood vessels, the fibrous tissues of the bronchial passages, the interlobular septa, and the sub-pleural connective tissue. The blood is returned by the bronchial veins to the right vena azygos and left superior intercostal, by them to the large veins at the root of the neck and then to the right side of the heart, where it mixes with the venous blood from the body generally.

These two systems supplying the lungs from the reverse sides of the heart are not entirely separate from each other, for the bronchial branches which supply the mucous membrane of the air passages end in capillaries which are in communication with the pulmonary veins, which thus return part of the bronchial supply. In this way obstruction to the turn of blood by the pulmonary

veins leads to congestion and catarrh of the bronchial mucous membrane. The tissues are richly supplied with lymphatics. This bronchial circulation in connection with the lymphatics furnishes nutrition to the pulmonary vessels and alveolar structures during the pneumonic disturbances and prevents tissue necrosis. Previous or existing diseases, sudden lowering of the temperature, trauma, and continued fatigue are among the predisposing causes, all tending to lower the vitality and lessen the resistance. Individual predisposition plays an important part in this as in all infectious diseases.

The usual severe and dangerous course of the disease in drunkards is due to the feeble resisting powers of their impaired organs.

Hygienic environments, as much as any other factor, influence the course of this disease. The room temperature and hygrometric condition of the atmosphere are important. While fresh air is necessary, the air should be kept at a temperature of 70 F. and rather dry. A cold, damp atmosphere will aggravate the disease. Keeping the skin clean by frequent sponging is both agreeable and beneficial to the patient.

It is unnecessary to enter into the details of symptomatology; however, a few words here will not be out of place. A patient, giving a history of chill, followed by a high fever, with pain in the chest, temperature 103 to 105 F., pulse rate 100 to 120, respiration from 40 to 60 per minute, cough, expectorating a bloody-like sputum, dullness over a circumscribed portion of the chest, the crepitant râles of Lænnec, which takes place immediately at end of the audible inspiratory sound, and occur as a bunch of very fine crepitations occupying but a second of time, and producing on the ear an impression of numerous individual but simultaneous sounds, like the crackling of burning salt, and the usual elevated position of the chest, cannot be mistaken for another disease. All of these symptoms may or may not be present at the time of the first visit. The demonstration of the parasite in the sputum, urine and blood, either or all is conclusive. The chief danger is cardiac failure. This is brought about by degenerative changes in the heart muscle, due chiefly to infective process, and not by high temperature or denutrition. Bouchard says: "I was led to think that excessive elevation of the temperature was the cause of the fatty degeneration, but Nounyn and Rosenthal found that no similar effect was produced in animals at the excessive temperatures observed in man suffering from disease. \* \* Excessive eleva-

tion of temperature is, therefore, not a source of danger from the point of view of anatomical lesion, or from the point of view of denutrition. We may say, therefore, that it indicates the gravity of the disease, but does not cause it. Elevation of temperature announces but does not constitute the danger."

Prof. Stephen Smith Burt, in a recent paper, says: "The chief danger with the heart, as referred to by me elsewhere, is an acute degeneration of its tissues, due to the toxins resulting from an infection by the diplococcus which calls rather for stimulation. If, however, this degeneration is extensive, there will not be much reserve power left in the organ to be brought into action even by stimulation." Prof. Burt further remarks that "While we cannot say positively that something may not be discovered that will neutralize the toxic products of the pneumococcus, or check its future germination, without being equally or almost as injurious to the patient, still many experiments in this direction are, considering the natural history of the infection and the ultimate well-being of the person affected, superfluous, if not absolutely pernicious in their consequences. Moreover, it is one of the objects of this paper to show that in all probability the rise of temperature in an infectious disease, such as pneumonia, is not only an index to the activity of the process, but also one of Nature's ways of safely inhibiting the growth and reproduction of the parasite micro-organism." Prof. Burt, with all other writers on the subject, does not believe that pneumonia can, when once started, be aborted or "arrested artificially; moreover," he says, "it is for the best interest of the patient's welfare to refrain from such futile endeavors.

"Aconite and its congeners," he says, "is worse than useless in pneumonia at any stage, for they are actually harmful; they depress the action of the heart and thereby produce one of the very things we desire to avoid, namely, internal capillary stagnation." He warns against the use of opiates as they diminish or "arrest the excretions, especially of the kidneys, the channels through which the poisons are chiefly eliminated." Digitalis is not a favorite remedy with him, "unless there is a previous valvular disease. It may be used with caution, and stopped if the function of the kidneys is thereby decreased, for one of the troubles of pneumonia is renal inactivity." In his recapitulation Prof. Burt closes with: "Last, though not least, specific remedies at best are but make-shifts; prevention of the infection is the desideratum."



Admitting with Prof. Burt that prevention is an important desideratum, that we may be able to prevent its spread to the immediate family by careful hygienic surroundings; but is there nothing we can do for our suffering patient but allow the disease to run its course, treat on the expectant plan, and wait for the crisis? Is there nothing that will change the vesicular exudate from a nutrient medium suitable for the rapid reproduction of the pneumococcus, and the elaboration of its powerful and dangerous toxins? Is there nothing that will render it antiseptic, preventing their growth and perhaps destroying their virility?

Dr. Andrew H. Smith, of New York, in 1899, in a paper on this subject, was first to call attention to the dual circulation in the lungs, with reference to the value of antiseptics in the blood and their influence upon the vesicular exudates, changing them from a nutrient culture medium to that condition which prevents the future growth and development of the pathogenic micro-organism; thereby inhibiting the production of toxins and arresting the morbid processes.

Let us examine creosote as a therapeutic agent in pneumonia. Dr. I. L. Van Zandt, of this city, about eight years ago discovered that creosote influenced his pneumonia cases beneficially and mentioned it to his medical friends, some of whom were much impressed and resolved to try the remedy which had given such success in Dr. Van Zandt's hands. Their reports were favorable, and they learned to rely upon creosote as the best remedy for pneumonia. Nearly all cases recovered in a much shorter period than had been common heretofore. Some were led to believe that they had been mistaken in their diagnosis and left off the remedy, when the symptoms reappeared, fever and the pulse and breath rate so peculiar to this disease evidencing new invasions and consequent toxic processes. A return to the remedy was followed by a cessation of the symptoms, and rapid and complete recovery. Dr. Van Zandt read a paper before this association, when in session at this place a few years ago, which attracted much comment, both for and against. Last winter in Greenville reprints of another paper were presented, still holding that creosote was a reliable remedy for pneumonia, and he concludes that "a large per cent. of pneumonic cases are cut short or aborted, almost all the rest are mitigated, and the remainder, a very small per cent., are not at all affected by the remedy."

Meanwhile, physicians in the North and

East, attracted by this brilliant report, gave it a trial; some became ardent advocates of it as a safe and reliable remedy.

Dr. James A. Burroughs, of Asheville, North Carolina, who has treated thousands of cases of tuberculosis with creosote, says: "I give creosote in from 50 to 60-drop doses in half an ounce of cod-liver oil, an ounce of whiskey and three ounces of cream. \* \* \* It is a very noticeable fact that patients do not develop pneumonia while taking creosote, neither are they susceptible to bronchial catarrh or influenza."

I have been using creosote in the treatment of pneumonia for about seven years, and running back over my notes for that time I find that I have treated 122 cases, with four deaths, or a death rate of 3 1-3 per cent. Two were very old ladies; one, 73, would not keep her bed, died third day; the other, 83, would not lie down, died third day; the latter's temperature never run over 100; complained of no pain; typical respiration and pulse rate; expectorating rust-colored sputum. One, a lady aged about 45, complicated with organic heart trouble and meningitis. One, a child three years old, following dysentery and whooping cough. Of the recoveries I will mention some which seem to be wonderful. A negro baby, 4 months old, brought to town on the first day of the disease, one of the coldest days in winter; stopped in a little cabin open on the south, had a big stove to warm the air; child when seen about sundown had a temperature of 105 F., respiration 100, pulse 120, both lungs involved, coughing, crying out, dullness over lower lobe of right lung and upper lobe of left lung with crepitant râles in affected areas; kidneys and bowels acting normally. Gave R Creosote Carb, gr. 50, Ammonium Salicylate, gr. 20, Pulvis Acacia, gr. 20, Syr. Simplex q. s. ad., 2 ounces. Mx. ft. emulsion. Sig.: Teaspoonful every three hours day and night, with instructions to allow it to nurse every two or three hours, and occasionally give a spoonful of water. Twenty-four hours later little change except in temperature, which was now 103 F., and the moist râles (râles redux) in the left lung which showed air was entering the lung, while less air entered the right lung. No respiratory elevation of the chest over the diseased parts. Continued creosote carbonate as before, and requested the family to watch for the pinkish borders on the cloths upon which the urine was passed. On the third day the moist râles of resolution were heard in all parts of the lungs, cough was less troublesome, and the pinkish border on



the cloth was seen. This, which is noticed only in rare and severe cases, is evidence of the excretion of detritus eliminated by the creosote through the kidneys. At this visit the temperature was normal, respiration 40, pulse 100, taking nourishment freely. On the fourth day the patient was discharged convalescent.

I will mention another case in which the patient was seen within an hour of the initial chill. She resided within a block of my residence. Mrs. B., age 36; was called at 6 A. M., found her propped up in bed, pulse 100, respiration 40, temperature 100, severe cough, rust-colored sputum. Painful respiration, increased by the cough. Auscultation and percussion revealed pneumonia in the lower lobe of right lung. R Creosote carbonate  $\frac{1}{4}$  drachms, ammonium salicylate 2 drachms, pulvis acacia  $\frac{1}{4}$  drachm, Syr. simplex q. s. ad. 3 ounces. Mx. ft. emulsion. Sig.: Teaspoonful every 2 hours. Five grains of Trional every 2 hours was given to allay pain. In less than one hour the first dose of creosote was given, followed in 30 minutes with the Trional. Some of the sputum was taken to my laboratory for microscopical examination; the pneumococcus capsulatus of Fränkel was found, which confirmed the diagnosis of pneumonia. Saw the patient again at 9 A. M., found her lying down, pulse 100, respiration 30, complained of pain only when she coughed, temperature 101, no nausea, bowels had moved freely, urine highly colored. Saw her again at 1.30, found her resting quietly, cough abated, with less pain, rust-colored sputum still present, pulse 90, respiration 26, deeper and without much pain; Trional discontinued, creosote continued. Saw her again at 6 P. M., found her cheerful, had taken several glasses of buttermilk as nourishment, no sick stomach, free from pain, coughed occasionally, expectorated rust-colored sputum; pulse 80, respiration 20, temperature 99; sent a graduate from the laboratory and ordered 45 minims of the mixture, reducing it from 10 grains to  $7\frac{1}{2}$  grains to the dose, to be continued throughout the night, every 3 hours. Saw her again at 9 A. M., second day; she had a good night's rest, except when disturbed to take her medicine; pulse 74, respiration 18, temperature normal, coughed occasionally without pain, expectoration easy, rust-colored. Had taken buttermilk several times through the night, was hungry; percussion showed slight dullness over the pneumonic area and auscultation proved that the air was passing into all parts of the lung with only slight obstruction; urine smoky;

continued creosote in 5-grain doses. Saw her again at 3.30. Her pulse, respiration and temperature still normal, no cough, wanted to get up. Discharged her on third day. She was sitting up in the room on the fourth day. Creosote was continued in 5-grain doses during the fifth day, when all medication was suspended.

This was during the month of December, 1897. The room temperature was kept at 70 F. day and night during the entire illness.

Many other cases similar, though not so severe in the onset, might be mentioned, but this one is given as an illustrative case, to show the value of creosote in this disease.

Creosote, according to late authorities, is a heart stimulant, it slows respiration, increases renal activity and is antiseptic. To this may be added that it stimulates the alimentary and respiratory mucous membrane. It is an expectorant; it prevents and destroys the products of fermentation; it prevents the tympanites so common in pneumonia; it is eliminated mainly through the lungs and partly through the kidneys; its action upon the products of congestion and inflammation, especially upon the vesicular exudate, is that of an antiseptic; it eliminates the toxins and morbid products in the circulation mainly through the kidneys.

In order to realize the benefits of creosote carbonate it must be given in sufficient doses to produce the desired results. In cases where the infection is severe, as marked by high temperature, quick and painful respiration, 10 to 20 grains may be given every two or three hours. A pleasant vehicle for its administration is important; this should be alkaline in reaction and void of alcohol, as acids or elixirs containing alcohol sets the creosote free, giving the unpleasant odor and taste of the drug, which not infrequently is nauseating to the patient. In a properly prepared emulsion there should be no objectionable odor or taste. I have never had the unpleasant effects of nausea and vomiting except in rare cases, then only where there was a catarrhal gastritis, which is not uncommon following the initial chill and high fever, especially in children. The nausea is usually controlled by sponging the body and limiting the amount of liquid taken into the stomach, without the interruption of the use of the creosote. The doses may be made smaller and given oftener until the stomach will retain the full dose.

On June 23, Dr. I. L. Van Zandt read before the Fort Worth Medical Society a statistical paper on "Creosote in Pneumonia," from which I here present an abstract. This

embraced reports of seventy-one physicians in territory ranging from Ontario to Honduras.

These reports gave 1,130 cases treated with creosote or creosote carbonate, with only 56 deaths, a little less than 5 per cent.

In quite a number of the fatal cases old age or complications are mentioned as a factor. The ages of some given are 54, 67, 72, 73, 83, 84, 84, "one very old man," and "two very old men." Of complications given three had cerebral meningitis; one gastric catarrh (that patient retained nothing for seven days); one obstructed bowel; one measles; one a double pneumonia following typhoid fever of five weeks' duration; double pneumonia with asthma; two cases were bottle-fed babies, the attacks following measles and whooping cough. Quite a number of other complications are mentioned, in all, twenty-two, not including old age, which, in itself, is a very serious one. Should these be deducted, as is sometimes done in making statistics, we would have a death rate of almost exactly 3 per cent. of presumably uncomplicated pneumonia.

Dr. Van Zandt then contrasts this rate of 5 per cent. with the ordinarily recognized death rate of 25 per cent., showing a saving of twenty lives in each 100, or 226 in his 1,130 cases. He then applies the same rate to the 30,000 deaths reported by the Registrar General of England in 1900, claiming that 24,000 of these ought not to have died; also, to the 105,971 deaths reported in the last United States census, claiming that 84,774 should have been saved. This leads him to again "express the opinion that the use of creosote or creosote carbonate in the treatment of acute pulmonary inflammations is one of the greatest life-saving discoveries of the nineteenth century."

Of the 71 reporters, 37 reporting 765 cases assert the abortive effect of creosote, 15 reporting 188 cases deny it, and 19 reporting 177 cases express no opinion on the subject, 57 reporting 1,025 express the belief that creosote mitigates the majority of cases, 2 reporting 10 deny it, and 12 reporting 95 fail to express themselves. Again, 23 say they have found "cases which, having had plenty of time, were entirely uninfluenced" by the remedy, 31 have not found such cases, and 17 fail to answer the question on this subject.

The author concludes that these figures furnish a strong confirmation of his opinion given in a former paper, viz.: "A large per cent. of pneumonic cases are cut short or aborted, almost all the rest are mitigated,

and the remainder, a very small per cent., are not at all affected by the remedy."—*The Texas Courier-Record of Medicine*.

### Carbolic Acid in Surgery.

In August, 1894, Powell (*American Journal of Surgery and Gynecology*, April, 1902,) found that he could control the action of carbolic acid under all circumstances, and since then he has extended its use to all cases of microbe wound infection. He is now prepared to proclaim its safety and unfailing reliability when brought properly in contact with the infected surfaces.

The carbolic acid found the most satisfactory has been made by Calvert, of England, and is known as Calvert's No. 1. With this acid there is no question as to the terminal result when properly applied.

In ivy poisoning make a 5-per cent. solution of carbolic acid and wet a gauze compress with it, place it over the surface inflamed for a period of ten minutes to half an hour, the time depending upon the age of the patient and the sensitiveness of the skin, then substitute gauze wet with a 2-per cent. solution, and continue its use until all traces of the disease have disappeared. Many patients will stand a solution stronger than this. In all cases when the ivy poisoning has appeared upon surfaces of the body other than the face, use a drachm to the ounce. When the surface is whitened, which will be in from five to fifteen minutes, then further action of the acid can be checked by the use of alcohol.

Specific urethritis will yield to one treatment in the majority of cases. In the female use a drachm to the ounce, having thoroughly cleaned the vagina, following the use of the acid with alcohol after the surface is well whitened and puckered, and following up its treatment by syringing with a warm 2-per cent. carbolic solution.

In the male a deep urethral injection is made of a 5-per cent. solution, and followed in a leisurely way with two or three syringefuls of warm or hot water. In cases where the infection has been long standing I have found it necessary to repeat the injection a few times.

Erysipelas is also amenable to treatment with this drug, and here we use 95-per cent. carbolic acid. Follow directions closely, for damage may result from a failure to observe this.

Powell manages it this way: Placing the patient flat on the back, and with the head

placed so as to present as nearly as possible a level surface of the face, he applies a 95-per-cent. solution of carbolic acid with a well-rolled mop of absorbent cotton. He watches the surface carefully, and as soon as it turns white swabs it off with alcohol. Materials should be at hand and readily available, and one should depend upon his judgment as to when the alcohol should be applied, and not upon the complaints of the patient. He paints the surface about the eye with pure acid, holding gauze pledgets in between the closed lids to prevent the acid entering the eye. One must be very careful not to allow the alcohol to be brought into contact with any part of the surface before the acid is applied, as it will prevent the acid from acting on that surface. In this way not only the entire face, but all of the surface involved by the disease, can be treated. A larger mop of cotton must be used so as to go over the surface rapidly and completely. Then in some cases it will act so quickly as to compel one to do it in sections, not only covering the diseased surface, but going over the line one inch or more; especially does this apply to the treatment of erysipelas in locations other than the face.

Lymphangitis, arising from an infected wound of the hand or foot and extending up into the limb, marked by a well-defined area of redness, swelling and pain, accompanied by high temperature, delirium, and more or less enlargement of the glands along the infection and in the axilla and Scarpa's angle, yields at once to this drug when applied in its full strength at the site of the infection and along the line of the lymphatics; neutralized, after its action, by the application of alcohol—limited, however, as Powell does not put the alcohol into the infected wound after having used 95-per-cent. carbolic acid in these instances, but does use it on the outside surfaces just as in cases of erysipelas. In these cases he envelops the limb in gauze of several thicknesses and keeps it wet with a 2-per-cent. solution of carbolic acid.

Every surgeon who has experienced the annoyance and suffered from the clinging smell which hangs to his hands for days after having opened abscesses will be pleased to know that the washing of the hands in a solution of one drachm to the ounce and rinsing them in alcohol will remove this odor and make his hands completely aseptic.

Abscesses, wherever located, can be treated speedily by the injection of or swabbing freely with pure carbolic acid. The size of the abscess or the amount of surface covered is not a factor. Only thorough drainage

and complete removal of the pyogenic membrane need be considered.

There are certain rules which pertain to all conditions. They are thorough application of the drug and thorough drainage. Thorough drainage may be obtained without such extensive incisions as we have been taught were necessary. Ordinarily an opening large enough to evacuate the pus completely is sufficient, but where there is a thickened pyogenic membrane, and curettage is essential for a rapid recovery, then the drain opening should be made large enough for the operator to penetrate the entire cavity. For instance, in mammary abscess, an opening large enough to evacuate the abscess completely would not extend over half an inch, but where there is an abscess of long standing, where a well-developed pyogenic membrane is formed, a larger opening must be made.

Abscesses in or about the joints, with fistulous tracts leading away which must be thoroughly curetted, must of necessity demand a larger opening.

Abscesses in bone require special treatment. It is easy to convince the most skeptical that carbolic acid extends far beyond the area of application in its influence; and so Powell pours the bone cavity full of a 95-per-cent. solution of carbolic acid and allows it to remain at least ten minutes.

Abscesses of the breast yield very readily to this treatment, and the solution of one drachm to the ounce is the proper one to use if the pocket has been emptied and irrigated. Powell believes it to be a mistake to put on any compress which will interfere with proper drainage. His custom is to hold the breast up in a sling, and in that way to secure good drainage.

Pelvic abscesses, abscesses of the liver, perityphlitic abscesses, all are treated in a similar manner.

Palmar abscesses, either those resulting from infections directly into the palm of the hand or from so-called felons, which are nothing but infections, are peculiarly adapted to treatment. It is best to make a small opening at the site of the original infection and swab out all the accessible cavity with a 5-per-cent. carbolic acid, and where there is a sinus leading up into the palm of the hand or up underneath the annular ligament above the wrist, pass along the silver-nozzle syringe, probe-pointed, and inject into that sinus a drachm-to-the-ounce solution of carbolic acid. The limb is then enveloped in gauze and kept wet with a 2-per-cent. solution.

Ischiorectal abscesses require a special

word. In Powell's practice he has found no occasion in recent years to cut through sphincters to obtain a cure. Make a small opening, half an inch usually, parallel with the outer fibers of the external sphincter muscle, and then use the curette if the abscess is of long standing; then swab it out with 95-per-cent. solution of the acid carefully and thoroughly. One can also use a long-nozzle syringe, and follow out any sinus which may lead from the abscess cavity, and into that inject pure carbolic acid. If the abscess is of recent date a drachm to the ounce is sufficiently strong; but if it is of long standing, and a pyogenic membrane is formed, it must be curetted and 95-per-cent. acid thoroughly applied. Alcohol is used only where it is necessary to limit the action of the acid. It is best to do the work with the acid alone, if possible, as it is not always safe to use a curette in cellular tissue. Wherever too much force is used a new abrasion is made, and that is a point for reinfection. This applies particularly to the treatment of ischiorectal abscesses and empyemas.

An infected uterus following childbirth can be treated as a large abscess cavity. Swab out the entire uterine surface with a solution of a drachm to the ounce of carbolic acid and pack the cavity well with a gauze bandage rinsed out of a 5-per-cent. solution. If the temperature of the patient does not fall immediately after this treatment, there are points of infection which have not been reached.

In mastoid diseases the results are more than satisfactory. It is essential to first secure thorough drainage and then to be generous with the amount of pure carbolic acid poured in; and use gauze drainage.

Aspiration is very frequently satisfactory in empyema, and is followed by recovery if it is made at a time when the pleural cavity is full of a perfectly sterile serum; but if, after one aspiration and removal of sufficient quantity of fluid, the condition recurs, do not aspirate a second time, because one is much more liable to infect the pleural cavity by aspiration than by making a free opening. After opening the chest the best plan is to irrigate the pleural cavity with a strong solution of carbolic acid. Introduce a solution, or emulsion, of one drachm to the ounce. Then wash out the pleural cavity with a 2-per-cent. solution; after it is perfectly clean pour in a solution of a drachm to an ounce until the pus pocket is filled, then empty it out and irrigate with a 2-per-cent. solution; lastly put in drainage, but do not put it in

far enough to interfere with the expansion of the lungs.

If the pocket has lasted a long time this treatment will not be effective. A pus pocket of long standing has a thick pyogenic membrane, and a solution of carbolic acid of one drachm to the ounce will not be of any effect. In such cases it is needful to make a larger opening and take out three, four, or five inches of one or more ribs. One should not make the mistake of making a square opening; take out a lengthwise piece of the rib and get a long opening, allowing curettage of the pleural cavity, which can be done without any harm. Then, while the carbolized water is running in, one should swab off not only the thoracic wall, but the wall of the lung as well. This breaks down the fibrin which has accumulated and become adherent and brings the solution in contact with the walls. Pour in the carbolic acid emulsion. Use a pitcher or a fountain syringe, and let it run in until the cavity is full. Let it remain in anywhere from three to ten minutes, according to the condition, age of the patient, etc. Turn the patient over and let it run out. If afraid of carbolic acid poisoning run in some alcohol afterwards. Drain out thoroughly and put in the drainage. Sometimes a second or even a third operation is necessary. If the lung has not been crowded up for a long time it will fill up the cavity very rapidly. If there is a partially solidified lung, and it goes back to only half of its original size, bring the chest wall to the lung.—*The Therapeutic Gazette*.

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#### Dilatation of the Stomach.

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By T. CLIFFORD ALLBUTT, M. D., F. R. C. P., F. R. S.  
Regius Professor of Physic in the University  
of Cambridge, Physician to Adden-  
brooke's Hospital, etc.

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In opening a discussion on the subject at the Manchester meeting of the British Medical Association, Dr. Allbutt confined his remarks chiefly to the atonic or non-obstructive dilatations of the stomach, as the obstructive dilatations were, comparatively speaking, well understood. Atony and atonic dilatation had not received the attention they deserved, atonic dilatation, indeed, being neglected by some physicians, and by a few even denied. Acute dilatation of the stomach he was disposed to attribute to compression of the gut by the distended viscus itself about the junction of the duodenum and jejunum. "The stomach," he said, "is supported more firmly at the

cardiac than at the pyloric end; and in any case its mean position is more vertical than is generally supposed, especially when empty. In estimating atonic dilatation, especially in its lesser degrees, the area of the cardiac moiety is therefore to be carefully observed. The stomach may drop as a whole into the mid-abdomen or hypogastrium, and this independently of more general enteroptosis. Gastropptosis is not necessarily attended with dilatation. In this case the stomach assumes a wallet shape, the cardiac and pyloric orifices approaching each other; or if the pyloric end slip more than the cardiac the position of the organ is more vertical and to the left. In this latter case the more muscular pyloric moiety is apt to become dilated by the gravitation of retained contents. The relation of gastritis to dilatation of the stomach is little understood. It would seem that excess of hydrochloric acid is not necessarily, or perhaps usually, in its earlier stages a consequence of gastritis; it may rather be the cause of it. During life the presence or extent of gastritis is often assumed on very slender grounds, and even our *post mortem* knowledge of it leaves much to be desired. Relaxation of the stomach, due primarily to muscular failure, and therefore appearing first in the pouch and fundus, may depend upon toxic causes or mere atony. Such gastric distension, advancing to dilatation, not uncommonly retards convalescence from such diseases as typhoid fever and rheumatic fever. When the condition follows slow digestion with fermentation anemia, or mere inanition, the muscular failure is primary. That spasm of the pylorus may cause dilatation of the stomach, as, for example, in ulcer, hyperchlorhydria, or lumpy contents of the stomach, seems not improbable. Such morbid action is consistent with what we know of other sphincters; but atonic dilatations rarely seem big enough to be due to a permanent spasmodic contraction of the pylorus; nor is the muscular coat, as we should expect, hypertrophied. In atonic dilatation peristalsis does not become visible. That the nervous system may be concerned in paresis of the stomach seems likely enough; not only that continuously depressing causes may act in this way, but that sudden and grave mental shock may be quickly followed by considerable atonic dilatation of the organ. The effect of alcohol, in so far as it may be a cause of dilatation, may act directly as a poison to the muscular fibre or indirectly by extension of inflammation

outwards. Atonic dilatation of the stomach is no rare consequence of exhaustion by excessive athletic exertion or mental stress, especially in young people of delicate constitution. Dilatation of the stomach is far from being rare in little children and infants; in them it often comes on acutely, but if the condition be understood it is readily relieved by emetic or the tube. The symptoms of atonic dilatation, to an observer not forewarned, are often indefinite, if not misleading. There may be little or no loss of appetite or dyspepsia; in an early stage of the disorder food often relieves a sense of sinking. Vertigo, sleeplessness, heaviness, lassitude and fatigue, and mental depression may divert attention to the nervous system. Flatulence, indeed, is rarely absent, but the tongue may be clean, vomiting slight or absent, the bowels constipated or the stools occasionally lienteric. The heart is apt to flutter or to intermit, and the abdominal aorta to throb. In extremest cases the pulse falls in volume and pressure, the hands become chilly, the nails livid, and the face thin, drawn and sallow. By physical signs we may determine the size and position of the stomach. In thin persons gastropptosis is not difficult to ascertain (in well-nourished persons it never seems to occur), and it is for the most part curable by rest, massage and better nutrition. When, as is usual, the dilated stomach occupies (approximately) its normal position detection of the disorder by physical signs will, generally speaking, be easy. Under ordinary circumstances peristalsis is never visible, as in obstructive dilatation, and the signs of distension are chiefly notable to the left of the middle line and under the lower ribs; the ballooned stomach is apt to push up the diaphragm and to encroach upon the thorax. The area of resonance may rise to the fifth or fourth rib and may extend to the posterior axillary line. Such a stomach often accompanies diseases of the heart and plays a large part in the patient's distress. Physical examination must be made at various periods of digestion and when the stomach ought to be empty. In health the stomach after a meal should contract upon its contents, when an area of dulness rather than of resonance will become apparent. Even in acute indigestion there is a considerable grip of these contents, a grip often attended with stomach-ache, but in atony, with or without static dilatation, an area of resonance at the cardiac end will be found almost immediately after a meal; even four or five hours after a meal the vault remains high, and, behaving capricious-

ly under gaseous influences, at no time does it contrast in any regular periods. Thus the pyloric moiety, in its turn unable to withstand the gravitation of its contents, increases from its comparatively small transverse diameter until the stomach as a whole may assume a uniform, thick, sausage shape, the upper outline of which may include the nipple and the lower the navel. Strangulation by sharp flexure of the pyloro-duodenal portion may occur in particular cases, but such cases are not so common as we suppose. Drooped kidney is often rather in association with atonic dilatation or gastropnoia than a cause of them, though Sir William Bennett and Mr. Bidwell have incidentally relieved dilatation by fixation of a right kidney. Dilated colon may be mistaken for a dilated stomach, and in rare cases the error may be unavoidable, but in the vast majority of instances by discriminating percussion, even without intubation, these two organs may be distinguished. The stomach may no doubt be wholly concealed by the colon, but ordinarily some narrow area of stomach resonance can be obtained, when a difference of percussion-note, either in pitch or clang, can be made out. In difficult cases syphonage or insufflation may help us; Von Ziemssen recommended in such cases alternate inflation of colon and stomach. The tuning-fork, ausculto-percussion and coin-tapping, in my experience, add little or nothing to what careful percussion can reveal. In a healthy stomach no squelchy sounds should be obtainable; they are usually obtainable in atonic dilatation, but rarely amount to the succession splash of obstructive dilatation. If before breakfast squelching can be obtained after the drinking of a tumbler or two of water we have to deal with a flabby and extended stomach. The use of the tube is of cardinal importance for diagnosis if not for treatment, but among private patients in England this method is resented and makes but little way. The normal fasting stomach contains at least from 20 to 30 cubic centimetres of residual fluid, and may hold even 100, but quantities above 100 cubic centimetres are morbid. In the normal state this residuum should not contain any particles recognizable as remnants of food. Seeds, grit or fibre in vomit or stool should be carefully noted, and the date when they were swallowed ascertained. The larger the residuum and the more obvious the relics of food the worse the case. A considerable admixture of mucus may indicate the presence of gastritis. In atonic dilatation sarcinæ and torulæ are not usually

found, lactic acid but rarely and in small quantity. The quantity of water accepted by the stomach gives us little information; individual tolerance is very variable, but in atonic dilatation the return of it is very feeble, or perhaps is obtained only by expression or syphonage. Illumination of the stomach from within is of little service. From radiography we may hope for some more information. Chemical tests for the delay of ingesta, such as salol or potassium iodide, may corroborate but cannot dictate a diagnosis. The treatment of atonic dilatation must largely depend upon the causation of the individual cases; particular symptoms will often indicate the means of their own palliation. Vertigo, often very severe, and lassitude after meals often depend upon distension of the stomach, and may be quickly relieved by careful regulation of diet and restriction of fluid at meals to the lowest quantity. In sleepless cases besides these measures, hydrotherapy expertly carried out is often the more useful as it takes the patient away from work and care into a bracing climate. In heart disease after much disappointment in the use of specific remedies, the cure or relief of an atonic dilatation of the stomach may be attended with remarkably good effects. Such patients, under the guise of a light diet, will consume quantities of farinaceous puddings, often well sugared, which disengage gases readily. Thirty years ago I traced a state of anemia and debility apt to appear in colliers and others engaged in similar work to dilatation of the stomach, a dilatation due to want of home meals and to the consumption of large quantities of liquid with heavy food rich in carbohydrates. Mastication must be carefully provided for and papain I have found to be a very useful aid in digestion. The abuse of corsets and belts must not be overlooked. In these cases rest not only after, but also before, meals is of importance. In some emaciated persons the full Weir-Mitchell system may be necessary, especially in gastropnoia; in all a long rest and change of air are of the first importance, nor should such persons on returning to their ordinary occupations expose themselves again to excessive stresses and other causes of exhaustion."—*Medical Press and Circular*.

CARDIAC DROPSY.—Calomel, gr. 1-5, should be given every two hours for four or five days; then combined with small doses of digitalis leaves, gr. 1-7 to gr. 1-3.—(FINKELSTEIN). *The Medical Record*.



### Notes on Chalybeate Therapy.

The Therapeutic Value of Pepto-Flangan (Gude).

By DR. J. W. FRIESER, Vienna, Austria.

The medicinal use of iron dates back to a remote period, and since ancient times ferruginous medication has played an important part in the treatment of anæmic conditions.

Since it has become known through clinical observation and investigation that iron introduced into the organism exerts a favorable influence upon pathological states of the blood, and that in anæmia and chlorosis, as well as in other anæmic conditions, it causes an increase of the number of red blood cells and of the percentage of hemoglobin, chalybeate medication has attained the importance of being almost a specific in this class of disorders.

The field of indications for the medicinal use of iron is quite extensive, for, aside from anæmia and chlorosis, it is called for in all diseases in which anæmic conditions occur either during their course or as their sequel—in short, in all cases in which, through some pathological state or another, the integrity of the blood is affected and impaired in a greater or less degree. To this group belong, first, the large number of constitutional affections, especially scrofula and rachitis; second, tuberculosis in certain stages of its development; third, certain nervous disorders which are commonly attended with anæmia, such as neurasthenia and hysteria; fourth, all conditions of weakness and exhaustion following severe acute febrile diseases or appearing during the period of convalescence from other serious diseases; and, finally, the anæmias arising in the course of chronic and wasting disease.

The chalybeates comprise quite a considerable number, all of which are intended to fulfil the therapeutic aim of supplying the lack of iron which is the source of the anæmic condition, of bringing about an improvement of the pathological state of the blood, and of promoting blood formation in a normal manner. Although at the present time we are still imperfectly informed as to the primary causes of anæmia and chlorosis, and do not as yet possess a clear insight into the inner workings of the pathological process, it must nevertheless be considered as demonstrated that the deficiency of iron in the body has its origin in certain functional anomalies of the blood-forming or blood-conserving organs, and that it is the result

either of pathological degeneration or of a lessened production by them. Conformably to the causal indication, the aim of treatment in these diseases is, therefore, to replace the deficiency of iron, which plays so important a part in the human economy, as completely as possible, and this can only be brought about by the introduction of sufficient quantities of ferruginous medicaments in an absorbable form.

According to recent and thorough studies of this subject we have to deal in anæmia and chlorosis, as well as in other anæmic forms of disease, besides the loss of iron, with a marked diminution of the manganese, which, like iron, is not an unimportant constituent of the blood, and for this reason an adequate equivalent appears necessary.

The number of ferruginous preparations at our disposal is much larger than in the case of any other medicaments, and almost daily we have an opportunity of acquainting ourselves with new remedies of this kind, so that, in view of the actual overflowing of the pharmaceutical market at the present time, it is not easy to find our way and to always make the proper choice. A glance at the large series of preparations which during recent times have been either newly discovered or introduced in an improved or altered form gives us an approximate idea of the new paths and aims followed in modern medication. Our widened knowledge of the physiological action of remedies, and the constant striving of chemists to produce drugs of the greatest possible specific nature, have enriched the *materia medica* with very valuable acquisitions which permit of a method of use corresponding to the requirements and more convenient for the patient.

It can be easily understood that the medical profession gives its full attention to any improvements in this domain, and especially in regard to the important criterion that the preparation under consideration must be of such character that it is easily absorbed, and hence can be utilized by the organism.

We are led more and more to recognize the fact (and this subject I have discussed in detail in a former contribution) that inorganic iron, owing to its slight absorbability and assimilability, as well as its difficult digestibility and its irritating action upon the mucous membrane of the digestive tract, is not at all adapted for the rational treatment of the forms of disease considered here, and that only iron of organic character which approximates in its composition to the iron present in our foods presents those advantages in improving the quality of the



blood which conform most closely to the demands of a logical and successful therapy. In this connection I must refer to the view of Bunge, which nowadays is shared by nearly all clinicians and pharmacologists, that iron introduced in inorganic form is either not at all absorbed by the intact mucous membrane of the gastro-intestinal tract, or only in minimum and therefore in inadequate amounts, and hence cannot be utilized for the formation of blood. Owing to this theory, which is forcing its way more and more to the front and is being accepted by many of the most vigorous adherents of the old iron therapy, the efforts of chemists have been more and more directed toward replacing the inorganic preparations of iron by easily assimilable and absorbable combinations, and from these have resulted from albuminates and iron peptonates, which, on account of their superior properties, have steadily gained in popularity. That, in spite of the existing indication and the demonstrated favorable influence of iron in the above-mentioned diseases, the results of ferruginous medication are occasionally uncertain and imperfect is, in my opinion, due to the frequently incorrect choice of the preparation employed and to the routine method of administration.

Hence, in judging a ferruginous preparation, we must decide the important question as to what should be the requirements of a useful and efficient chalybeate in every direction if all demands are to be met in a scientific and practical manner. Above all, such a preparation must be capable in a high degree of absorption and assimilation, must be digestible, easily borne, palatable, and must not in any manner exert disturbing by-effects upon the functions of the organism.

According to my extensive observations, these postulates are fulfilled in a satisfactory manner by Pepto-Mangan (Gude). I have had frequent opportunities, in a considerable number of cases (42) in which the preparation was employed with success, to acquaint myself with its therapeutic value and its beneficial medicinal properties.

In the administration of Pepto-Mangan to anæmic and chlorotic patients I have been able to make the positive observation that under its use the constitution of the blood underwent a very satisfactory and sometimes remarkable improvement, often after a comparatively short period of treatment. The examination of the blood frequently showed a rapid increase of the number of red blood cells and of the percentage of

hemoglobin, this being attended by a marked improvement of the general health and an increase of strength. Its advantageous chemical composition and its excellent medicinal properties, such as easy assimilability, high absorption and assimilation power, and the absence of any deleterious or disturbing by-effect, illustrate particularly the advantages of this remedy, whose efficiency is evident in most cases.

A glance at the physical character and composition of the preparation will easily enable us to form a correct idea of its value.

Pepto-Mangan contains iron and manganese combined with peptone in the proper proportions and in a readily digestible and absorbable form, so that the preparation can be completely utilized by the organism. As is well known, the peptones represent artificial pre-digested products which, when taken into the organism, make no special demands upon the digestive functions, which in anæmic and chlorotic persons are usually weakened and impaired in action. This fact is the more important, since in these cases the digestive process and the secretion of gastric juice is usually reduced, in consequence of which the nutrition is quite impaired, while frequently there is a condition of hyperacidity of the gastric juice. It has been most gratifying to me to observe that during the use of Pepto-Mangan, which experience has taught me is particularly adapted in these maladies, it does not interfere with or exert any disturbing effect upon the digestion. On the contrary, under its administration the appetite and the digestion are stimulated in a very satisfactory manner.

As a rule, during treatment with Pepto-Mangan the improvement in the constitution of the blood, as shown by physical examination, was accompanied by a beneficial effect upon the general condition and strength. The appearance and appetite of the patients improved visibly; the digestion and nutrition progressed favorably, and the patient felt better, happier and more vigorous. Disturbances of the gastro-intestinal tract, such as pressure or pain over the stomach, nausea, disagreeable feeling of fulness, a diminution of appetite, constipation, congestions, etc., which are so frequent during the administration of other iron preparations, especially those of inorganic character, were scarcely ever observed during the use of Pepto-Mangan (Gude). On the contrary, in those cases in which there is a tendency to constipation and a marked atony of the gastric functions my experience has led me to regard this remedy as especially useful and

effective. Under its administration the functions of the intestines, especially the peristalsis, are often stimulated in a remarkable manner, and the existing constipation yields to a regular condition of the bowels.

It seems to me particularly noteworthy that often, even after a brief use of Pepto-Mangan, the anæmic appearances, especially the often marked apathy, lassitude and drowsiness, the palpitation of the heart and headache, disappeared in a very satisfactory manner, and that even in those patients who suffered from insomnia frequently a good refreshing sleep occurred. Even in those instances in which a variety of other ferruginous preparations had proved unavailable the prolonged use of Gude's Pepto-Mangan often gave very gratifying results, so that occasionally a manifest and positive cure occurred after four to six weeks' treatment.

Aside from primary anæmia and chlorosis, the preparation produced beneficial effects in all those diseases which are apt to be attended with or followed by anæmic conditions of various kinds and degrees. As a rule, its action in scrofula and rachitis was excellent, and no less favorable in the incipient stages of tuberculosis in which anæmic phenomena are frequently observed. Furthermore, it proved of value in conditions of debility, during convalescence from acute febrile and exhausting diseases (pneumonia, typhoid and other infectious diseases), and finally in those chronic wasting maladies often accompanied by anæmic states, such as tuberculosis, malaria, protracted gastrointestinal catarrhs and chronic dyspepsias, in all of which the administration of a strengthening and tonic remedy appears indicated.

An especially advantageous influence is exhibited by Pepto-Mangan in the case of weakly, anæmic and ill-nourished children, as well as in anæmic women. In these cases its use often proves most servicable, so that I have learned to award it the preference and prescribe it usually with excellent results.

Particularly striking was the success of treatment with Pepto-Mangan in three cases of very severe chlorosis and in two cases of marked acute anæmia following considerable losses of blood. In a comparatively short period of administration (five weeks) a most remarkable improvement, both of the general state and the appearance of the patient, as well as of the condition of the blood (rapid increase of the number of red blood cells and percentage of hemoglobin), took place.

I cannot refrain from mentioning that in several cases in which the administration of iron appeared contraindicated owing to marked digestive disturbances or to an acute febrile state, Pepto-Mangan was prescribed by me without any drawbacks, but rather with eminently satisfactory results.

According to all these observations in my practice, which are completely confirmed by many favorable reports from other sources, I would regard Pepto-Mangan (Gude) as an excellent and effective remedy, which is entitled to a prominent place among the iron preparations at present at our disposal.

While characterized by a high degree of absorbability and assimilability, being easily digested and well borne, this remedy is free from any deleterious properties, is willingly taken by the most capricious patients, and is uniformly well tolerated. The fluid form and pleasant taste of the preparation render its administration convenient and agreeable for the patient, and, as must be particularly emphasized, the remedy, even when administered for months, does not excite the least aversion, an advantage which certainly is not to be underestimated. A review of those cases which were particularly benefited by Pepto-Mangan would be best calculated to demonstrate its high therapeutic value, but must be omitted here in order that the present article might not become too voluminous.

In view of the recognized advantages of the preparation and the favorable results obtained with it, it should be esteemed as a very valuable acquisition to the materia medica, and can be warmly recommended for extensive use in the treatment of anæmic conditions and chlorosis.

It is my custom to direct that Pepto-Mangan be taken in these cases to the exclusion of other treatment, and only in combination with appropriate dietetic measures, for periods of several weeks, and if necessary longer, three to four months. For adults I prescribe three tablespoonfuls to three or four dessertspoonfuls daily, for children three teaspoonfuls daily, in water or some white wine. During the entire time of administration I prohibit the use of raw fruit, acid or highly-spiced dishes, and order a vigorous and regulated diet. In severe cases of anæmia and chlorosis I recommend rest in bed for some time, and if possible have the patient placed in a well-ventilated sitting-room; while in the lighter cases I order, besides the medicinal treatment, a frequent sojourn in the open air, and if possible a prolonged stay in the country

in a carefully selected place, and short and non-fatiguing walks.

In some instances I have observed excellent results from a rest cure in conjunction with ferruginous medication and appropriate hygienic and dietetic treatment.

### \*Puerperal Fevers—From a Surgeon's Standpoint.

By EMORY LANPHEAR, M. D., PH. D., LL. D., St. Louis, Mo., Chief Surgeon of the Woman's Hospital of the State of Missouri.

In the modern hospital puerperal fever is now practically unknown; the once frightful mortality has been reduced to zero by the application of surgical principles to obstetric practice. From hospital experience we have learned (a) that normal labor and normal puerperium are attended by normal temperature; (b) that "auto-infection" is impossible—or practically so; (c) that "milk-fever" is a myth; (d) that any rise of temperature above 99° F. generally means infection, and (e) that infection depends upon some fault of the doctor or nurse. Among country doctors, and also in the work of city practitioners not thoroughly familiar with the aseptic technic, puerperal infections are still almost as common as in pre-antiseptic days, and with midwives the mortality is something appalling. This must continue until every accoucheur learns that the confined woman is a wounded woman and treats her with the same attention to surgical cleanliness as if the peritoneum were to be opened.

#### CAUSES OF HIGH MORTALITY.

The persistence of puerperal infections, in spite of the fact that we know them to be preventable, may be ascribed to:

- I. Non-familiarity with the various causes.
- II. Inappreciation of the term asepsis.
- III. Gross carelessness.
- IV. Meddlesome interference with a natural process.
- V. Spread of venereal diseases.

#### NON-FAMILIARITY WITH CAUSES.

I. We have now reached a point in our knowledge of the pathology of the puerperal state when it is possible to differentiate—clinically as well as theoretically—between the various forms of infection. The broad terms "puerperal fever," "puerperal sepsis," "puerperal peritonitis," etc., must be discarded—they are but relics of the pathology of yesterday. We must be more definite—not merely to be scientific in our methods,

but because the severity of the attack, the prognosis, and the proper selection of therapeutic measures (medical as well as surgical) must depend entirely upon the character of the poison producing the fever. Unfortunately our knowledge is not yet sufficiently broad to enable us to make a differential diagnosis in every case; but in most instances it is possible to determine the precise cause and intelligently apply the proper treatment. But to do this requires a thorough comprehension of the pathology of acute infections of the genital tract; a working knowledge of practically all of the pyogenic bacteria—their natural history, period of development and the clinical phenomena they may produce.

The normal vulva constantly contains myriads of bacteria, pathogenic as well as innocent, which may be easily introduced into wounds of the genital tract by careless methods.

The normal vagina of the pregnant woman does not contain any of the pyogenic micro-organisms, hence the impossibility of "auto-infection" of the pelvic organs in natural labor.

The vagina contains innumerable forms of non-infective bacteria normally, but these disappear at the cervix, no microbes ever being found in the cavity of the uterus under natural conditions.

The secretions of the cervix uteri, as well—in less degree—as those of the vagina, possess mild antiseptic power, so that unless an unusually large number of virulent organisms be introduced no severe infection is apt to occur.

Those micro-organisms which give rise to acute infections of the genital tract must of necessity be introduced from a dirty vulva or by unclean fingers or instruments; and the path the poison follows may be (1) through a wound of the perineum, (2) through a tear of the vagina, (3) through a lacerated cervix, (4) through the uterine sinuses or (5) even through the Fallopian tubes, as by introduction of a dirty hand for extraction of placenta. The pyogenic organism being thus implanted may give rise to merely local wound infection, to a severe localized inflammation, or to a rapidly fatal sepsis, the result depending chiefly upon the character of the particular bacterium at fault.

#### VARIETIES.

1. Saprophytic infection.
2. Streptococcus infection.
3. Bacillus coli communis infection.
4. Staphylococcus infection.
5. Gonococcus infection.

\* Read before the Texas State Medical Association, Dallas, May, 1902.

6. Pfeiffer bacillus infection.
7. Klebs-Loeffler bacillus infection.
8. Infection with vibriion septique Pasteur.
9. Pneumococcus infection.
10. Mixed infection.

#### 1. SAPROPHYTIC INFECTION ("SAPREMIA").

The most common, the most dangerous, the most easily cured infection of the lying-in period is of saprophytic origin. While the vagina of the normal woman contains none of the pyogenic bacteria, it often swarms with saprophytes—the germs of putrefaction, or decomposition—which no amount of preliminary douching will destroy. Under ordinary conditions these germs are non-pathogenic, but when a piece of placenta is left in the cervix or uterus, when large bloodclots remain in the uterine cavity, or when drainage of even the natural discharge of blood is interfered with, putrefaction begins. Frequently the womb is able to expel the foul, stinking mass and the worst that then happens is an offensive lochial discharge with a slight rise of temperature. In other instances Nature is not able to care for the patient, and an illness of intense severity arises.

Everything apparently goes well for 36 to 48 hours after labor, when the patient becomes somewhat restless, with slight elevation of temperature. In a few hours there may be a sharp chill (but the initial rigor is very often absent), followed by a sudden rise of temperature to 104 or 105, with much swelling of the abdomen and tenderness, and the inexperienced doctor regards the case as one of "peritonitis." Examination of the vaginal discharge, however, immediately shows the character of the trouble—the stinking discharge alone is sufficient to assure the attendant that the entire trouble is dependent upon retention of rotting material.

If the woman be seen at this stage and promptly treated, the condition is not usually a serious one; but delay means death.

When one is called to a case of "puerperal sepsis" the first point to determine is whether the condition is sapremia or septicemia, to use the phraseology of the nineteenth century. It being decided that the fever is due to saprophytic infection, i. e., bacteria of decomposition working in retained debris, there is but one thing to do, clean out the uterus and vagina thoroughly, and at once. From the always well-dilated os the stinking, putrid mass may be removed by the fingers, a dull curette or a large Volkmann's spoon. Chloroform should invariably be given so that if necessary the entire hand may be introduced to determine that every trace of decaying

material is removed. The uterus should not be "curetted"—especially with the sharp curette—there is nothing wrong with the endometrium.

For irrigation formalin solution, one-half of one per cent., will be found cheap and effective.

A typical case of this degree of infection is the following:

#### ILLUSTRATIVE CASE.

Mrs. A—, patient of Dr. W. M. Dunn, of St. Louis, aged 30, second pregnancy, was perfectly comfortable until 36 hours after the fetus was expelled, when she had a slight elevation of temperature; a few hours later there was a hard chill, followed by a temperature of 106. She was admitted to the Woman's Hospital with distended abdomen, putrid discharge from the vagina, temperature 106½, but skin cold and "clammy," slight delirium, heart intermittent and weak. Examination showed the os well dilated, but a fragment of placenta and some remnants of membranes hanging in the cervix. (In justice to Dr. Dunn, it must be said he was not in attendance until a few hours before her admission to the hospital, and therefore was not responsible for her condition, the accoucheur being a "professor" in a St. Louis medical college.) Removal of the putrescent mass, with copious irrigations of mildly carbolyzed hot water, immediately relieved the condition and restored the woman to a practically normal puerperium. In this instance it was possible to remove the offensive material with the fingers and a strong current of hot water.

When the patient is not treated at all, or is improperly managed, the disease usually progresses rapidly until death closes the scene.

A typical case of this kind is the following:

#### ILLUSTRATIVE CASE.

Mrs. R—, patient of Dr. H. G. Nicks, of St. Louis, was admitted to the Woman's Hospital Dec. 9, 1901, suffering from puerperal sapremia. She had been delivered by an eminent practitioner of St. Louis, who unfortunately left some placental fragments and membranes in the uterus of a woman of extremely filthy habits. Saprophytic infection promptly followed, and he, mistaking the indications for treatment, instead of carefully cleaning the vulva and vagina and then simply removing the putrefying mass with a spoon or dull curette or fingers, chloroformed the patient and energetically "scraped out" the uterus with a sharp curette. While the

decomposing material was greatly diminished by this procedure, there was much outpouring of blood, which, in turn, became retained and infected with the bacteria of putrefaction. The fever therefore continued at 105, delirium ensued, diarrhea followed, the skin became cold and clammy, and Dr. Nicks was called. But it was too late; the venous sinuses, reopened by the use of an improper instrument, allowed the system to become overwhelmed with the saprophytic poison and she died, showing a life sacrificed by the fact that a busy practitioner did not recognize saprophytic infection and treat it according to surgical principles.

Packing the uterus in such cases, after emptying it, is improper, a simple gauze drain through the os being sufficient.

In ordinary cases repetition of the irrigation is not advisable—the possibility of engrafting a streptococcus or staphylococcus infection upon the already weakened parts is a greater danger than leaving some little decaying matter in the uterus. On account of this menace to life, too, the utmost care must be maintained during operative procedures, as strict asepsis should be maintained for a curettement as for an abdominal section! The simple existence of a stinking discharge is no excuse for dirty surgical procedures. If the temperature again rise after the fall which always follows emptying and irrigating the uterus and vagina, one intra-uterine douche is advisable, invariably to be given by doctor and not by nurse.

A second curettage is rarely permissible, especially if the first has been perfect, unless a secondary infection with pyogenic organisms occur.

## 2. STREPTOCOCCUS INFECTION.

Next to puerperal sapremia, streptococcus infection is the most frequent of the septic fevers of child-bed. Germs of erysipelas are everywhere, notably under the finger-nails of doctors! The physician who attends scarlet fever, erysipelas, diphtheria, carbuncle and other infective diseases in which the streptococcus plays an important, if not a causative rôle, is almost certain to infect his patients if he attend confinements without taking the most extraordinary precautions as to hand disinfection. [This fact was indeed known, clinically, long before we learned of the existence of the streptococcus—just as was also that dissection of dead bodies by an obstetrician would cause "child-bed fever" before we found that saprophytes are the cause of decomposition—as well as the most virulent form of puerperal infection.]

Streptococcus infection usually occurs through a torn perineum or lacerated cervix; occasionally through the uterine tissues primarily. As this germ is one which does not readily give rise to extensive suppuration, we can readily understand how it happens to result in huge inflammatory exudates in the pelvis, the uterus, tubes and ovaries often becoming welded into a solid mass from the pelvic peritonitis and pelvic cellulitis, without the formation of an abscess in either the tubes or the cellular tissue. Later on it is true, if "resolution" does not occur, and particularly if a mixed infection (with staphylococcus or bacillus coli communis) arise, pus may form either as pyosalpinx or abscess of the broad ligament, or both.

There are three grades of fever which may follow streptococcus infection. (a) In the first there is a mild erysipelatous inflammation of the perineum near and involving its wound, which does not differ materially from facial or other mild forms of erysipelas. If the infection be recognized early and properly handled (particularly in the matter of refraining from douching or other manipulation which inclines to introduction of the germs to the internal parts), it may amount to but little.

Probably the best treatment of this slight degree of infection is to paint all of the inflamed surfaces and about one inch of healthy tissues with 95-per-cent. carbolic acid, followed immediately by pure alcohol, and the application of a 10-per-cent. ichthyol ointment.

The usual course of this variety is illustrated by this case:

### ILLUSTRATIVE CASE.

L. J.—, patient of Dr. Geo. Howard Thompson, was delivered at the Woman's Hospital. There was complete laceration of the perineum, necessitating immediate suturing. By imperfect preparation, on my part, or possibly by reason of the rectal tear, streptococcus infection of the perineal wound occurred. On the fifth day there was a slight rigor with a succeeding temperature of  $101\frac{1}{2}$ , with much pain at the line of sutures. Examination of the wound showed a mild erysipelatous blush, which next day presented the characteristic appearance of erysipelas as seen elsewhere in the body. As there was no evidence of pelvic complications, and the fever did not go above  $103\frac{1}{2}$ , the uterus was not examined or treated. Bichloride (1-1000) douches of the ostium vaginæ and the external application of car-

bolized gauze (1 to 20) constituted the sole treatment, under which the disease ran a mild course and terminated favorably by the end of the fifteenth day. The uterine and vaginal discharges were, in this case, able to take care of the internal genital organs, so that the woman is in excellent health, save for a perineum imperfectly united.

Here was a case in which active surgical treatment would have resulted disastrously. Had repeated examinations been made, had vaginal douches been given, had intrauterine medication or curettage been attempted, there is no doubt but that acute pelvic peritonitis, if not worse, would have followed. Good results came from judicious non-interference.

(b) Unfortunately such slight attacks are rare, and are limited to perineal infection. When the streptococci have been introduced directly into the uterine tissues through (1) a lacerated cervix, or (2) the wounded endometrium, there is set up a metritis and pelvic peritonitis.

For about a week after labor the patient seems to be doing fairly well. On the sixth to ninth day there is a chill, followed by a temperature of 101-103, with much pain in the pelvis, some distension of the abdomen and other evidences of a mild form of pelvic peritonitis. As the disease progresses it becomes apparent that the fimbriated extremities of the Fallopian tubes have become clubbed and perhaps buried in some pelvic exudate; that the uterus is fixed in the inflammatory deposit; that the sepsis is gradually disappearing under mild saline laxatives, just enough codeine to allay the pain and hot vaginal douches, and that recovery from the acute attack will occur without pus formation.

But the "recovery" is apparent rather than real. These are the cases which fill our hospitals and sanatoria, and which give such brilliant results in the hands of our great abdominal surgeons—brilliant so far as mortality is concerned; often dubious enough so far as the happiness of the patient is involved, if she be a woman with the true mother instinct.

This is the mild type of pelvic infection so common following criminal abortion. To it and sterility due to gonococcal salpingitis may be ascribed the present decadence of the French nation, and to these may be traced the already alarming decrease in the birth-rate of American-born women. The future of America truly depends upon the hand cleanliness of the obstetrician of today as well as upon such moral training of our girls as will abolish criminal abortion.

A case typical of this form of streptococcal infection is the following:

#### ILLUSTRATIVE CASE.

Mrs. C., patient of Dr. J. T. Walsh, developed fever on the ninth day after confinement, but the temperature did not go above 102, nor was there much abdominal distension. Pain in the pelvis was severe for four or five days, but gradually disappeared under perfect rest, hot douches, enemata and mild salines. At the end of the third week after labor, there was still mild general sepsis with the uterus fixed in inflammatory deposits; but instead of abscess formation there was gradual absorption of the exudate and recovery of a fair degree of health part of the time. One year later the woman was still a semi-invalid, and pelvic examination shows both tubes and ovaries fixed in the bottom of Douglas's cul-de-sac, chronically inflamed, tender, enlarged. Perpetual sterility and ill health are before her unless she submit to pelvic section.

(c) In the most severe type of streptococcus infection the beginning is much the same as in the milder form—a fairly smooth period of five to nine days after delivery, then a chill, followed by a fever of 103-104; next another chill, succeeded by a temperature of 104 or 105, with profuse sweating afterward; in other words, the typical course of a profound streptococcus septicemia plus the local signs of pelvic peritonitis, vaginal examination showing the uterus, tubes and ovaries to be soon imbedded in a mass of inflammatory deposit, the formation of which is accompanied by much pelvic pain, abdominal distention and extreme suffering.

Very frequently the streptococcus septicemia runs an extremely rapid course, terminating in death within two or three days after the initial chill—notably true of women delivered while suffering from scarlet fever or erysipelas. In other cases a general peritonitis follows the local infection, and death occurs from three to six days after the onset of the attack. Fortunately, a large proportion of women have the strength to survive, in which cases the fever gradually subsides and the local conditions slowly improve, unless pus form, when the woman has the usual history of the formation of pelvic abscess, with ultimate death from chronic sepsis if the pus pockets be not emptied either naturally or surgically.

An illustrative case is the following:

#### ILLUSTRATIVE CASE.

Mrs. P. L.—, patient of Dr. J. C. Sulli-



van, was delivered by a midwife. Everything seemed to go well until the seventh day, when a severe chill occurred, followed by a temperature of  $103\frac{1}{2}$ . Next day another chill was succeeded by a fever of  $104\frac{1}{2}$ , and the next day the register was 105. On the fifth day of the fever the doctor made vaginal examination and found the uterus fixed in a mass of exudate. Rightly divining that curettage would be worse than useless, and that the only hope of a favorable termination lay in supportive treatment and local measures calculated to cause absorption of the exudate, Dr. Sullivan used quinine and strychnine internally and hot douches thrice daily, with ichthyol and glycerine tampons at night. Gradually the fever subsided, and a slow convalescence seemed established, when a hard chill and high fever, followed by sweating, foul tongue, mawkish breath and other evidences of sepsis, showed that pus had formed and needed operative measures. On admission to the hospital at the end of the sixth week, the pelvis was found completely filled with exudate, the uterus was immovable, deep fluctuation could be detected in each broad ligament and pyosalpinx was suspected in addition to the abscesses of the connective tissue around the uterus. The os was gently dilated, and the uterus irrigated with lysol solution; the abscess cavities were opened and the thin, ichorous pus allowed to escape; the pus pockets were gently curetted and packed with iodoform gauze, but the Fallopian tubes could not be reached from below. Three weeks later, the general condition having greatly improved, the two suppurating tubes and the uterus were removed by abdominal section, and the patient made a slow but perfect recovery.

Here was a case in which, had a bacteriological examination of the uterine discharge revealed nothing but a pure streptococcus infection at the time of highest fever, Marmorek's anti-streptococcus serum might possibly have been of benefit, but I must confess that thus far I have been disappointed in its use in streptococcus septicemia.

Intravenous injection of normal saline solution proves beneficial in a small percentage of cases.

The chief indications are, however, supportive measures of the strongest kind (whiskey, strychnine, forced feeding, etc.), non-interference with the endometrium, local antiseptic treatment (douches and tampons) and opening of pus pockets as soon as they can be detected, either above or below.

### 3. BACILLUS COLI COMMUNIS INFECTION.

This microbe inhabits the large intestine, and plays an important part in the production of appendicitis, suppuration of ovarian cystis, etc. The proximity of the anus to the vagina renders contamination of perineal wounds and lochial discharges easy. Considering the carelessness of women and nurses in their mode of cleaning the rectal outlet it is small wonder that mild puerperal infection is common.

Enough cases known to be distinctly of this type of fever have not been seen to permit a description of the characteristic clinical history, but the following case-record will show what I believe to be the chief symptoms:

#### ILLUSTRATIVE CASE.

Two hours after delivery I was called to sew the perineum of a primipara in previous good health. The tear extended to the anal margin. There was also an extensive laceration of the left side of the cervix, which I did not attempt to repair. She had been attended by a competent man, who had used every necessary antiseptic precaution. But in transferring her from the table to her bed her bowels moved, and by a semi-conscious movement of her hand the patient smeared wound and vulva with fecal matter. The greatest care was used to again disinfect the parts, but an acute inflammation, with intense suffering, necessitated removal of the sutures on the fifth day. The cervical wound became infected, and a thin, purulent discharge followed. At no time did the body of the uterus become implicated in the inflammatory process, nor did the temperature of the patient rise above  $101\frac{1}{2}$  (a characteristic feature of bacillus coli communis infection is the comparatively low temperature), but an abscess formed to the left of the uterus, in the loose connective tissue, which had to be widely opened and loosely packed with gauze. Bacteriological examination of this pus, as well as the discharge from the cervix, showed colon bacilli and a few undifferential staphylococci; that from the perineal wound gave bacillus coli communis, with staphylococcus epidermidis albus in large numbers also.

Many of the mild puerperal fevers, hitherto regarded as light septicemia, will in future, I believe, be classed as bacillus coli communis infections.

### 4. STAPHYLOCOCCUS INFECTION.

When it is remembered that the various



forms of staphylococci are found everywhere, in air, and dust, on all cutaneous and most mucous surfaces, it is astonishing that infection with this germ is not more common in the puerperal state. That its tendency is to produce a purely local suppuration (the staphylococcus pyogenes aureus being the particular germ of the "laudable pus" of our medical ancestors) rather than general infection is the probable explanation. When general infection with it does occur the course is about as follows:

#### ILLUSTRATIVE CASE.

Mrs. B——, patient of Dr. W. H. Townsend, was confined with her first child without chloroform or forceps; labor normal, with slight tear of the perineum. She had a suppurating sore of the finger, and in spite of the doctor's warning, would change her gauze pads. On the third day there was a slight chill, with temperature of 102 afterward, and two or three days later suppuration of the perineal wound was noted. The fever continuing, an eminent teacher of obstetrics was called, and although the uterus was not fixed nor greatly enlarged or tender, on account of the continued fever (100 at morning, 101 at night), he curetted, without obtaining anything but blood. There was a chill soon afterward, followed by much pain in and above the uterus, with higher fever. Irregular chills, fever and night sweats, etc., succeeded. Three weeks later an abscess could be made out to the left of the midline above Poupart's ligament. Under chloroform I opened this, and evacuated a quart or more of staphylococcus pus, gently curetted the abscess walls and stuffed with gauze. Good and speedy recovery has followed. Examination of the pelvis under anesthesia showed the uterus to be freely movable, and no larger than normal at that period after labor.

Here was a case in which the folly of curettage of the uterus in some forms of "puerperal fever" is apparent. The temptation to "do something" (for a fee) in the way of operation should be resisted to the limit of simply following the plain indications only.

#### 5. GONOCOCCUS INFECTION.

In cities, where gonorrhea is so common, puerperal infection due to Neisser's coccus is, in my opinion, next in frequency to that caused by the streptococcus, and it is far more common in country practice than generally believed.

The symptoms are not so acute as in sapremia or streptococcic septicemia, but are

sufficiently severe to be alarming. The course of the disease does not differ materially from gonorrheal pelvis peritonitis in the non-puerperal woman, except in the intensity of the initial chill and fever.

#### ILLUSTRATIVE CASE.

I. C——, patient of Dr. G. H. Thompson, contracted gonorrhea some weeks before an abortion. Three days after abortion (produced by a female doctor), chill, fever and abdominal tenderness developed. Next day Dr. Thompson found temperature 101, pelvic peritonitis developing, uterus enlarged and tender. Curettage and drainage did not improve her condition, so she was admitted to the Woman's Hospital. For three weeks the peritonitis ran a mild course under the use of salol and codein, with mild laxatives and douches of hot water twice daily, the temperature gradually dropping from 101 to 99. Then a sudden chill and a rise of fever to 104½, with intense abdominal pain, seemed to call for immediate abdominal section. On opening the abdomen it was found that an acute gonorrheal pyosalpinx had ruptured and general peritonitis resulted. The abscesses were removed and the pelvis cleaned and drained, but death from acute sepsis followed in thirty-six hours.

This is the typical history of this form of infection—up to the time of the rupture of the pus tube. Usually the patient lapses into chronic invalidism until she falls into the hands of a surgeon, who recognizes the condition and either kills or cures, according to his particular skill. Most of the patients recover perfect health after thorough operation.

#### 6. PFEIFFER BACILLUS INFECTION.

When we consider the general prevalence of la grippe and the now well-known tendency of the Pfeiffer bacillus to produce pus under favorable circumstances, we may well be surprised at the probable infrequency of puerperal infections due to this microbe.

#### ILLUSTRATIVE CASE.

Mrs. S——, known to be suffering from la grippe at the time of her expected confinement, was admitted to the Woman's Hospital for accouchment. On account of her bad condition every precaution was taken; she was confined on a glass table in the surgical operating room, under chloroform anesthesia, with forceps, with the same care as if an abdominal section were being made, but of course, on account of the necessity for frequent changes of the bichloride dressings over the vulva there was more

or less exposure of the perineum, which was lacerated to the extent that four sutures were needed. Everything went well until the seventh day, when the nurse reported the perineal wound "irritated". Examination showed it to be infected by some germ—there was a thin, irritating pus around each stitch, and in the wound. On the ninth day (the general grippal symptoms having all disappeared, and the friends expecting the woman to sit up the next day), there was an unexpected rigor, the temperature shot up to  $107\frac{1}{2}$ , and dissolution seemed imminent. Within two hours she was anesthetized and the uterus dilated and gently curetted, the high temperature seeming to indicate delayed sapremia, but nothing was found excepting the same thin, pale pus which covered the perineum. The perineal sutures were cut, and the wound (which showed no tendency to unite and was covered with a diphtheritic looking "membrane") allowed to gape. Examination of the pus from both perineum and uterus showed nothing but pure Pfeiffer bacilli present. Next day the temperature dropped to  $96\frac{1}{2}$ , and again rose to 107, when 10 grains of acetanilid, with one ounce of whiskey, were given, with a cool sponge bath. Antiseptic douches were given every six hours, with an interuterine irrigation on two occasions, a strand of gauze being carried through the os each time for drainage. Large quantities of strychnine and milk punch were given by mouth. For six days the temperature varied from 97 to 106, and then gradual convalescence occurred, with full restoration to health. At no time was there any uterine fixation or tenderness, tubal enlargement or sign of peritonitis.

#### 7. 8. 9. OTHER FORMS.

The three other distinct forms of puerperal sepsis are so rare that I pass them without special reference. I have seen but one case of pure Klebs-Loeffler infection in a perineal wound, and neither of the other two.

#### 10. MIXED INFECTION.

Mixed infection is very common, especially staphylococcus with streptococcus and streptococcus or staphylococcus with gonococcus. It simply adds seriousness to the situation and calls for more care in dealing with any form of puerperal infection.

#### INAPPRECIATION OF TERM "ASEPSIS."

II. A great many physicians, especially those who graduated before the adoption of laboratory teaching in our medical schools,

do not appreciate the ease with which a wounded surface may become infected by these minute forms of plant-life, and hence do not realize the true meaning of the word "asepsis," nor comprehend exactly what is meant by the term "sterilize." They have "caught on" to the extent that they use them with a glibness which would almost deceive, but there are thousands of men who, when they attempt to put into practical application that which they have heard about "hand sterilization," content themselves by merely washing the hands with soap and water for a few minutes, and then mechanically dipping them into bichloride solution of uncertain strength, declaring then that their hands (which may but a short time before have been in contact with diphtheritic scarlatinal or erysipelalous patients) are "aseptic"! These men believe they have fulfilled all the requirements of modern obstetrics if they wash the patient's vulva with soap and water, dash a little of some antiseptic fluid on it, and proceed to deliver on a dirty old sheet, after putting their "sterilized" hands into some pocket for a chew of tobacco. These are the men who are filling our cemeteries with professionally murdered women; who are keeping our hospitals filled with patients for abdominal and pelvic surgery. Of the more than 2,000 peritoneal sections I have now made, I believe more than one-third could be traced to careless methods of physicians! They did the best they knew, you exclaim? Undoubtedly, but this is an age in which doctors should know better, and knowing, do better.

When we consider that practically every case of puerperal infection is preventable, the present condition of affairs is truly disgraceful to our profession, both teachers and practitioners; the one for failure to instruct properly, the other for failing to learn and act properly.

The excuse that women, especially in country practice, will not permit thorough cleaning of the external genitals is not a good one. Most of them will if the necessity be explained to them; if not, the woman herself must be instructed how to clean herself as well as possible. But the chief fault usually lies with the doctor himself—too many vaginal examinations with improperly prepared hands; filth beneath the finger nails annually kills more people than does typhoid fever! A large proportion of cases arises from the introduction of unboiled obstetric forceps through an uncleaned vulvar orifice, and in instrumental delivery there can be no excuse for either.

## HOW TO STERILIZE THE HANDS.

For common obstetric work the hands should be prepared thus: They should be energetically scrubbed for at least five minutes with soap and water (hot, if possible,) and a stiff brush; then dried, and the nails trimmed down to "the quick"; then washed in turpentine for half a minute or more; then scrubbed for another five minutes, with particular attention to the spaces under the end and around the base of the nails; then rinsed freely in alcohol, and finally immersed in 1 to 2,000 bichloride solution. When thus prepared the hands may be considered fairly safe for introduction into a vagina which is soon to be bruised and wounded, providing they do not touch chair, bed-clothes, stockings or anus of the patient on the way thereto.

When it is likely that the hand must be introduced into the uterus (as for version or extraction of placental tissue) they must be washed in saturated solution of potassium permanganate until very brown, decolorized with strong solution of oxalic acid and rinsed in bichloride solution, after the same careful scrubbing. The same process should be followed if an infectious case of any kind has been lately seen, or an abscess lanced, or a decaying tooth pulled, or an infected wound dressed. Anything short of this mode of hand-preparation is criminal negligence.

Wearing of rubber gloves is a poor substitute which may be employed in emergencies.

If the patient will permit, the vulva and pubes should be shaved, scrubbed and sterilized in the same manner as the hands; if not, the parts should be rendered as nearly sterile as possible by scrubbing and the application of antiseptic solutions.

No attempt should be made to scrub or even douche the vagina unless it is known to be already infected.

## GROSS CARELESSNESS.

III. Inattention to these details by those who know constitutes gross carelessness. Many men become careless through extensive, laborious practice and an ever-growing confidence in the powers of Nature to care for her own. In perhaps 999 cases of labor the natural process can be depended upon, but the 1,000th case (or the very first) may be the one to add grey hairs to the head of the conscientious man who realizes that his inattention to the necessary details of surgical cleanness has cost a human life. No man ought to become so busy that he cannot practice in a thoroughly scientific manner, and this is especially applicable to obstetric work.

But more often, perhaps, the carelessness lies in neglecting to see that the mother is properly cared for during the first 24 hours following labor. After the lochial discharge is well established the downward drainage and glazing of wounded surfaces will most likely protect the patient, but for the first day or two there is much danger of post-partum infection. Five yards of bichloride gauze cost but half a dollar, and may save a life if used to protect the vulva instead of "any old cloth" usually employed.

The ordering of vaginal douches to be given by incompetent attendants is another piece of gross carelessness. If the conditions are such as to demand the use of a douche at all within the first two days they are serious enough to require the doctor to give it himself. It is rarely needed.

Most careless of all is the inattention paid to tears of the perineum. If the woman be in a clean bed, be carefully confined and receive good attention after delivery, there is no great danger in a small wound of the perineum; but if she be in bad surroundings, and if her after-care is not to be ideal, every tear, however small, should be at once repaired, with special attention to those often unprotected wounds of the vaginal wall with skin intact.

No doctor is now justifiable in attending any woman in confinement without putting on a freshly washed (even if not sterilized) muslin gown over his clothing.

The ideal method of delivery is upon a portable surgical table (which costs but \$20) on a sterilized Kelly pad covered by a freshly boiled towel or sheet.\* If the patient will not consent to this, the bed—always dirty from a surgical standpoint—must be covered with a rubber sheet positively sterile, with boiled towels over it. Anything short of this constitutes gross carelessness.

The doctor's chief fault in carrying out these details consists in using a Kelly pad or rubber sheet which has not been rendered surgically clean after the last confinement or surgical operation. The best method, when the physician has no sterilizer, is to have the rubber scrubbed with soap and water, then "gone over" (both sides—everywhere) with pure carbolic, then with alcohol, and finally with bichloride solution 1 to 500; and then wrap it in a sterilized cloth instead of "jamming" it into a dirty grip with the thought: "That isn't exactly 'surgical cleanliness,' but

\*At the Woman's Hospital one vaginal examination is made after preparation of the woman; then an antiseptic vulvar pad is applied and left until "the waters break," when she is transferred to the table, thus being ready for instrumental delivery or for sewing any tear if these be necessary.

it will be as clean as the next patient is!" It is just such little slips that cause so many deaths.

#### MEDDLESOME INTERFERENCE.

IV. Among the North American Indians puerperal infections are rare, in spite of their filth, chiefly because the fingers are never introduced into the vagina. There can be little doubt that repeated vaginal examinations, attempts to hasten labor by (unclean) digital dilation of the os, rupture of the membranes, etc., are the cause of a large proportion of puerperal infections. Normal labor is physiological, not a pathological process. Too much interference with Nature's plan breeds mischief. One, or at most, two vaginal examinations should suffice. Instrumental or even digital efforts to hasten labor should be resorted to only on definite indications, and then with all surgical precautions.

#### SPREAD OF VENEREAL DISEASE.

V. The rapid and alarming spread of venereal diseases (especially of gonorrhea, which is worse than syphilis) needs but to be mentioned to be appreciated. It is the duty of every doctor to caution every patron who is a prospective father to carefully abstain from illicit intercourse during the later months of his wife's pregnancy. Many cases of blindness as well as gonorrheal sepsis may be prevented by a few timely words from the not yet (thank God!) extinct family doctor.

#### CONCLUSION.

In conclusion I wish to state emphatically that "puerperal fevers" will practically disappear when doctors, nurses and midwives learn that *the woman in labor and immediately after should be treated upon the same rules of antisepsis as govern the surgeon in the most extensive operation.*—*American Journal of Surgery.*

THE TREATMENT OF NECROSIS OF THE FRONTAL BONE.—Arthur H. Burgess, in *The Medical Chronicle*, dresses the ulcer with hydrochloric acid of a strength sufficiently great to dissolve the lime salts contained in the exposed bone at its base, i. e., ten per cent. This is applied on a double fold of lint, cut to the shape of the necrosed area, and covered with a layer of gutta-percha tissue; over this is placed lint smeared with boracic ointment, a pad of absorbent wool, and a bandage. This is left on for twenty-four hours, then removed, and the

ulcer washed with boracic acid, and pepsin in the powdered form dusted lightly over the surface. The lint, impregnated with a 0.2 per cent. solution of hydrochloric acid, is applied as before. The dressing is removed next day, and replaced by the strong acid dressing, and so on alternately. By this means the bone is slowly dissolved, the necrosed parts are cast off, and a healthy granulating surface is left. The boracic-acid dressing is used, cicatrization proceeds, and the ulcer becomes covered with epithelium.—*The Medical Record.*

#### Ptomaine Poisoning.

(Reprinted from the *Medical Summary*, May, 1902.)

#### To the Editor of The Medical Summary:

During the past summer I had, perchance, more cases of ptomaine poisoning than in all my previous twenty-nine years of active practice. I presume that the prevalence was greatly due to the extraordinary heat of this summer. Notwithstanding the severity of some of the cases, my patients all recovered.

Before entering into a detailed description of some of the most severe cases, a definition of the word "ptomaine," with some views of competent authors, will be well placed here.

"Ptomaine," says V. C. Vaughan, "may be defined as an organic chemical compound, basic in character and formed by the action of bacteria on nitrogenous matter." He further states that "some fish are always poisonous. Others are poisonous, or at least markedly so, only during the spawning season. Still others are subject to epidemic bacterial diseases, and those affected with certain of these diseases furnish flesh that is toxic to man, or, in other words, the bacterial disease is transmitted to man with his food. Lastly, fish, like other kinds of meat, may become infected with saprophytic germs that may harm man."

Schmidt says: "The poisonous substance is not distributed throughout the animal, but is confined to certain parts. The poisonous portion cannot be distinguished from the non-poisonous, either macroscopically or microscopically."

I treated altogether twelve cases, of which nine were fish, and three lobster poisoning.

The best illustration of a severe case of fish poisoning is the case of William R., a grocer, thirty-two years of age, of robust and good health. He made his lunch of fish (none in the family could give me any information about the class of fish). It was an unusually hot day in the month of July.

He felt no discomfort until after midnight that day, when he was awakened by nausea and griping pain in his bowels. Soon vomiting set in of mucus, colored with bile. When I was summoned, I found the man with cold perspiration pouring down his face. Soon after, fever set in to a temperature of 102; pulse, 140; respiration about 40, shallow and irregular. Pain in the stomach and intestines, with great sensitiveness on pressure. I proceeded to wash his stomach and large intestines, administering right after a dose of five grains of calomel, following it up, the coming morning, with a bottle of citrate of magnesia, for the cleansing of the small intestines. Morning's temperature, 101; pulse, 130, with excessive tenderness to the digestive tract. Second day, temperature the same, pulse more firm; sensitiveness to stomach and bowels diminished, having had a number of watery stools during previous day and night. I prescribed an antiseptic intestinal wash, Glycozone, two ounces, hot water, twenty-four ounces, for mornings and evenings. At my evening's call the temperature was 100; pulse, 110; respiration, 28. Having had some favorable experience with the internal use of Glycozone in acute gastritis, I then prescribed a teaspoonful to be given, diluted with water, every three hours. This treatment was kept up for a week, until all unfavorable symptoms disappeared.

The other case of serious nature was a lobster poisoning. Mrs. M. S., about twenty-five years of age, was eating a "fresh" lobster in a first-class restaurant, at night, after a theatre performance. She felt some discomfort right after eating it, but thought to counteract it by drinking a big dose of whiskey. She slept all night without disturbance. However, in the morning, when I was summoned, I found her suffering from nausea, vertigo, ringing in the ears, "like big bells," as she expressed it, pain in all the joints, and griping pain in the bowels; no stool. Temperature, 101.5; pulse, 140; respiration, 36. The same treatment as above was prescribed, and the woman made a quick recovery.

All other cases were treated similarly, with gratifying results.

However, taking good advice from my first case, I started with the antiseptic treatment at once, as I don't know of any better remedy to stop vomiting than Glycozone.

ALEX. RIXA, M. D.

New York.

In the papers pertaining to a recent death claim, the physician states that the evidences of death were "crape, assemblage of friends and notices in the papers."

#### A Notable Improvement in the Therapy of Typhoid Fever.

The recent discovery, by Duval and Bassett, of the presence of the bacillus dysenteriae (Shiga) in forty cases of infantile summer diarrhea awakens renewed interest in the subject of intestinal antiseptics. But a few months have elapsed since Drs. P. C. Freer and F. G. Novy, of the University of Michigan, demonstrated the enormous germicidal power of benzoyl-acetyl-peroxide, more familiarly known as Acetozone. Although the preliminary reports of these investigators were of necessity based upon results of laboratory experiments, their expectations are already being realized in clinical work, in the treatment of typhoid fever particularly.

In the city of Chicago, where a large number of cases of typhoid have been reported, Acetozone has been used exclusively in the treatment of about 300 of them. The consensus of opinion is that it causes the temperature to decline earlier than usual in the course of the disease, and it ameliorates the mental and physical condition of the patient, in all probability by controlling the toxemia.

Two Chicago practitioners, I. A. Abt, M. D., and E. Lackner, M. D., have thus far reported (*Therapeutic Gazette*, October, 1902,) forty cases of typhoid, in children, treated with Acetozone, with but two deaths, a mortality of 5 per cent. One of the patients that died succumbed to pneumonia and pulmonary edema, the other to great pyrexia on the fifth day. Stupor and tympanites were almost entirely absent in all the cases; the characteristic typhoid fetor of the stools was markedly diminished, and the hemorrhage occurred but twice, and in the same case. The average duration of the febrile period, in 37 cases, after beginning Acetozone treatment, was 13½ days. The drug did not seem to act upon the heart or respiratory apparatus.

Early this year Eugene Vaddin, M. D., of the U. S. Marine Hospital Service, Buffalo, N. Y., reported 27 cases (*American Medicine*, Feb. 8, 1902,) of typhoid fever, 24 of which were treated with Acetozone, all of the patients recovering. The writer says: "Its application in typhoid fever has been followed by very happy results; its use has been directed to the destruction of the germ in its primary lung colony and also in its secondary intestinal colony, and it has been used by hypodermoclysis to combat terminal expressions, with the result that in 24 cases the disease has been limited almost entirely to the expression of intoxication from the primary focus, the intestinal symptoms remain-

# Phillips' Emulsion

50% best NORWAY COD LIVER OIL  
minutely sub-divided,  
WITH WHEAT PHOSPHATES (Phillips')

Pancreatized, Palatable, Permanent, Miscible in Water, Milk, Wine, etc.

# Phillips' Milk of Magnesia

Mg H<sub>2</sub> O<sub>2</sub> (FLUID.)

"THE PERFECT ANTACID."

for correcting Hyperacid conditions—local or systemic.  
Vehicle for Salicylates, Iodides, Balsams, etc.

# Phillips' Phospho-Muriate of Quinine, COMP.

TONIC AND RECONSTRUCTIVE.

WHEAT PHOSPHATES, WITH MURIATE OF QUININE AND STRYCHNINE.

PHILLIPS' WHEAT PHOSPHATES (ACID).

PHILLIPS' SYRUP OF WHEAT PHOSPHATES.

PHILLIPS' DIGESTIBLE COCOA.

THE CHAS. H. PHILLIPS CHEMICAL CO., NEW YORK.

## The HOME MODIFICATION of COW'S MILK

is the title of a useful 32-pp. book which we publish. In it the various details of scientifically preparing cow's milk for an infant's digestion are discussed and many formulas are given. The book is appropriately illustrated, printed in two colors on fine coated paper and bound in cloth. We will gladly send it FREE of CHARGE to any physician, and hope to have the pleasure of receiving your request for it.



THE SOWER — MILLET.

MELLIN'S FOOD COMPANY, BOSTON, MASSACHUSETTS

No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.



ing entirely in abeyance, and the disease has been shorn of many of its most disagreeable features."

In a second paper, which appeared in the *Therapeutic Gazette* for May 15, 1902, the same writer states that his patients were given from 1500 to 2000 Cc. of the aqueous solution of Acetozone daily. The diet was milk diluted with the same solution. The first influence of the drug is observed in the increased secretion of urine. That this is not due wholly to the ingestion of large quantities of water necessitated by the use of the saturated solution is evident from the author's assertion that the same result was observed when Acetozone was administered in capsules. The second influence to which attention is directed is the very pronounced decrease of the odor of the stools, while plate cultures from the dejecta showed comparatively few germs.

The deodorant and diuretic effects of Acetozone were also observed by G. H. Westinghouse, M. D., (*Buffalo Medical Journal*, August, 1902,) who used it in seven cases. This observer remarks that with the increased flow of urine "a corresponding reduction of typhoid symptoms followed, and tympanites and delirium disappeared." It should be remarked that the diagnosis in all these cases, as well as in most of those reported by the Chicago physicians, was confirmed by Widal's reaction and Ehrlich's test, and in some a blood-count was resorted to. Westinghouse concluded his paper by saying that "Acetozone, as an intestinal antiseptic, is unequalled by anything I have ever employed. A complete subsidence of all the bowel symptoms followed in every case of typhoid within a few days after beginning its use. The application of the antiseptic consisted, in most cases, in simply allowing the patient to drink the saturated aqueous solution *ad libitum*, or, in other words, substituting this solution for all other liquids, and urging the patient to partake of it freely when the natural craving was not sufficient to insure the consumption of considerable quantities."

A GODSEND. — Hungry Hoke: "Lady, cud yer let a poor feller hev a slice uv yer angel-cake, same as yer give ter Weary Wraggles yes'dy?"

Mrs. Newlywed (sweetly): "Why, yes. Here is the remainder of the loaf."

Hungry Hoke: "Oh, t'ank yer, mum; t'ank yer! an' may God bless yer. Now I kin git inter de horspittle, same ez Weary did."—*Judge*.

## News and Abstracts.

### A Successful Medical Club.

The Waterville Clinical Society held its first meeting, after the usual summer vacation, at the Elmwood hotel Monday evening, Sept. 15, 1902. A large number of members were present from this city and surrounding towns. The paper of the evening was presented by J. E. Wadsworth, of Skowhegan. The subject, Myxoedema, was presented in an able manner, and reports of several cases given. A general discussion of interest followed.

A glance over the present membership of the society shows that it has grown far beyond the borders of the city in which it was originally organized, full ten years ago. From a strictly local society it now includes as active members many physicians located in neighboring towns. Monthly meetings are held on the third Monday evenings, and the society extends a hearty welcome to any physician who may find it possible to be present.

### Four Hundred Dollar Prize.

Dr. J. B. Mattison, Medical Director, Brooklyn Home for Narcotic Inebriates, offers a prize of \$400 for the best paper on the subject: "Does the habitual subdermic use of morphia cause organic disease? If so, what?"

Contest to be open two years from December 1, 1901, to any physician, in any language.

Award to be determined by a committee: Dr. T. D. Crothers, Hartford, Conn., Editor *Journal of Inebriety*, chairman; Dr. J. M. Van Cott, Prof. of Pathology, Long Island College Hospital, Brooklyn, and Dr. Wharton Sinkler, Neurologist to the State Asylum for the Chronic Insane, Philadelphia.

All papers to be in the hands of the chairman, by or before December 1, 1903, to become the property of the American Association for the study and cure of inebriety, and to be published in such journals as the committee may select.

### Thirty-Eighth Annual Meeting of the Somerset County Medical Association.

The thirty-eighth annual meeting of the Somerset County Medical Association was held recently at the Gerald, Waterville. The session opened at 9.30 o'clock, with the following program:



THE BEST RESULTS ARE ASSURED IN BROMIDE  
TREATMENT WHEN YOU SPECIFY

# PEACOCK'S BROMIDES

AND THE GENUINE IS DISPENSED.



NEUROLOGISTS and General Practitioners prefer it because of its superior qualities over the commercial salts. . . Each fluid drachm represents fifteen grains of the combined chemically pure Bromides of Potassium, Sodium, Ammonium, Calcium and Lithium.

DOSE: ONE TO THREE TEASPOONFULS, ACCORDING TO THE AMOUNT OF BROMIDES REQUIRED.

# CHIONIA

From CHIONANTHUS VIRGINICA.

RE-ESTABLISHING portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.

Hepatic  
Stimulation.

Without  
Catharsis.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES A DAY.

FOR CLINICAL TRIAL WE WILL SEND FULL SIZE BOTTLE TO ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

PEACOCK CHEMICAL CO.  
ST. LOUIS, MO., U. S. A.

In CARDIAC and GENERAL MUSCULAR RELAXATION,  
due to Functional Cardiac and Circulatory Disturbances,

# CACTINA PILLETS

Has many Advantages over other Heart Stimulants.

IT HAS NO CUMULATIVE ACTION, AND  
IS ABSOLUTELY SAFE AND RELIABLE

EACH PILLET REPRESENTS ONE ONE-HUNDREDTH OF A GRAIN CACTINA, THE ACTIVE PROXIMATE PRINCIPLE OF CEREUS GRANDIFLORA

DOSE: ONE TO FOUR PILLETS THREE TIMES A DAY.

SAMPLES MAILED TO PHYSICIANS ONLY.

The CHIEF Characteristics of the Physiological Action of

# SENG

Is to promote Normal Digestion by encouraging the flow of Digestive Fluids.  
It is the Modern and Most Successful Treatment for  
**INDIGESTION.**

A PALATABLE PREPARATION OF PANAX SCHINSENG  
IN AN AROMATIC ESSENCE.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES A DAY.

A FULL SIZE BOTTLE, FOR TRIAL, TO PHYSICIANS WHO WILL PAY EXPRESS CHARGES.

SULTAN DRUG CO., St. Louis, Mo., U. S. A.

No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.

Reading of the Records of last Meeting.  
Report of Censors.  
Transaction of Business.  
Election of Officers.  
President's Address.

"The Use of Ophthalmology to the General Practitioner," by L. K. Austin, M. D., Waterville.

Discussion opened by E. M. Wing, M. D., No. Anson.

Intermission was then taken for dinner, after which the session was resumed, and the following papers read and discussed:

"Acute Uremia," by L. K. Blanchard, M. D., Hartland.

Discussion opened by S. F. Greene, M. D., Solon.

"A Case of Ovarian Tumor, History, Removal, Subsequent History," by J. L. Pepper, M. D., Madison.

Report of cases, and general discussion.

The following officers were elected to serve for the ensuing year: President, W. G. Sawyer, Madison; Vice-President, J. L. Pepper, Madison; Secretary, H. G. Taggart, Skowhegan; Censors and Committee of Arrangements, Drs. Sawyer, Galineas and Taggart.

#### The Maltine Prize Essays.

The Maltine Company announces that two hundred and eight essays on "Preventive Medicine" have been entered in competition for the two cash prizes—one thousand dollars and five hundred dollars respectively,—which that firm offered last February. These essays are now in the hands of the three judges, Dr. Daniel Lewis, of New York; Dr. Chas. A. L. Reed, of Cincinnati, and Dr. John Edwin Rhodes, of Chicago, and their decision is awaited with great interest by the medical profession at large.

See notice of Practice for Sale in this number.

In the supplement to the *Journal of Tuberculosis* the whole subject of tuberculosis is covered by a series of articles written by Dr. Carl Von Ruck. For controlling the cough of pleurisy, one of the complications of phthisis, the doctor says (January, 1902, Page 101,): "Cough must be allayed by heroin, codeine or even morphine, the choice being in the order named, but only when required on account of severe pain. I have also employed papine, which has given me very satisfactory results and which possesses the very desirable advantage of not causing constipation."

#### What is Intra-Abdominal Pressure?

By DR. O. HAGEN-TOERN (*Cent. f. Gyn.*, Aug. 23, 1902.)

This paper is written in protest against the views recently expressed by R. Meyer that "Intra-abdominal pressure is only the creation of the imagination" and does not exist. After studying conditions in the cranium, with its fixed bony wall; in the thorax, with its fairly rigid walls adherent to the thoracic contents and automatically following their rhythmic movements; in the abdomen, with its muscular wall, the author reaches the following conclusions:

There is no negative intra-abdominal pressure simulating that in the thorax.

There is a constant change in intra-abdominal pressure, which is usually of a positive nature, but may under certain circumstances become negative. There is, however, a local varying pressure in different parts, which at times may be added to or subtracted from the others.

He hopes to be able to prove or demonstrate at some time that the positive intra-abdominal pressure is the sole cause of hernia.

The location of intra-abdominal pressure is within the entire abdominal cavity. It may, however, be chiefly located in the peritoneal cavity itself, although the intestinal lumen—as far as it is not occupied by its contents—does not escape from its influence.—*The Post-Graduate*.

#### Panopepton in Typhoid Fever.

##### CLINICAL REPORTS.

I. Girl, ten years of age. When patient was first put upon Panopepton, the little nourishment that was retained was passed through the bowels wholly undigested; milk and limewater and milk and malt, etc., had been used. A teaspoonful of Panopepton was given every three hours and was the only nourishment taken for ten days. Panopepton was continued all through the severe and critical period.

"I have no hesitation in saying that my patient's life was saved by the use of Panopepton."

II. Woman, forty-two years of age; fever continued fourteen weeks, a relapse occurring at six weeks; had been unable to take food of various kinds previous to taking Panopepton, which was given first in eighth week. Began with one teaspoonful every three hours, then gradually increased to tablespoonful four times a day; result was very satisfactory, and at no time was there any irritation of the bowels.

*Doctor:*

*When seeking a palatable and highly nutritious liquid food to maintain a patient's strength during critical illness, remember NUTRIENT WINE OF BEEF PEPTONE.*

---

**ARMOUR & COMPANY**

**CHICAGO**

### Two Old Friends.

We have received some five-grain antikamnia tablets, and also tablets of this drug combined with codeine. Antikamnia, as its name implies, is an analgesic and anodyne, and it has gained much favor in the United States, both for this and for its antipyretic action. It has been proven not to depress the heart, after the manner of many other coal-tar preparations. Each antikamnia tablet contains 5 grs. of the drug (the usual dose), which can be repeated every fifteen or twenty minutes, until three or four doses have been taken. Antikamnia and codeine tablets consists of  $4\frac{1}{2}$  grs. of antikamnia and  $\frac{1}{2}$  gr. of codeine and have been especially brought forward for the treatment of pain where spasm or physical causes of irritation exist. Neuroses due to suppressed or irregular menses, particularly during the menopause, seem more amenable to this combination than to antikamnia alone. Antikamnia and codeine tablets are especially indicated in membranous affections of the lungs, throat and bronchii. Both tablets merit a trial in neuralgia and spasmodic ailments and as their freedom from injurious action upon the heart and circulation is invariable, they will certainly continue to be received by the profession with favor.—*Edinburgh Medical Journal*.

**RASHES AFTER ENEMAS.**—Monro (*Glasgow Medical Journal*, September, 1899,) reports six cases in which rashes followed the administration of rectal injections, and reviews the literature relating to the subject. The rashes seem to occur only after the use of copious injections, and not after small glycerin or nutrient enemas. The average time of appearance of the eruption is about twelve hours after the injection. The duration of the rash is from one to several days. Three types of rash have been recognized, the scarlatiniform, measly and urticarial. The rash may be universal, but the buttocks, thighs and face are the favorite seat. Desquamation is rare, although Copeland observed it in one case. Burning or severe itching may accompany the eruption, and occasionally there is slight fever. The writer calls attention to the liability of mistaking the scarlatiniform enema-rash for that of scarlet fever, and is of the opinion that some cases of so-called surgical and puerperal scarlatina are instances of scarlet rash due to enemas. The theory generally advanced to explain the occurrence of the rash is that it is due to the rapid absorption and excretion by the skin of fecal matter, which

has been rendered more or less soluble by the large quantity of water injected into the bowel. Morgan suggested that the eruption was caused by a special kind of soap, and this view was supported by Gardner, who observed several cases after the use of hard yellow soap, but no instances in 400 cases in which he used soft soap. Monro, while objecting to Morgan's theory, believes that it is better to use soft instead of hard soap for enemas.—*The Philadelphia Medical Journal*.

### Objectionable Advertisements in Religious Publications.

It is, unfortunately, only too true that parsons and retired military men often prove the warmest supporters of "Quackery." Doubtless more or less adequate explanation of the fact might be presented, but to afford such is not at present our purpose. We wish merely to direct attention to the widespread prevalence of objectionable advertisements in so-called religious publications. Papers which should have been guided by the highest ethical considerations have permitted their advertising columns to become the means for unscrupulous persons to practice the most cruel frauds upon the poor and ignorant, many of whom innocently imagine that whatever appears in a religious paper must be honest and altogether trustworthy. The editors of many of these "religious" journals cannot claim release of responsibility on the grounds of ignorance. We know that in several instances some of the honored members of our profession have seriously sought to abate this scandal, but hitherto, we fear, with but little success. It seems incomprehensible that "religious" papers should, for the sake of financial gain, stoop to accept such advertisements as a high-class "lay" newspaper would rigorously exclude. Unless those responsible for the conduct of these "religious" papers can speedily make up their minds to clear their columns of such filthy and dishonorable advertisements as now find place in them, we venture to think it will become a public duty to expose them to the "wicked world," as well as to "the religious public."—*The Medical Press and Circular*.

EASY.—Chorus: "Oh! what shall we play?"

Robert: "Let's play horse-show."

Chorus: "But we haven't any horses."

Robert: "You don't need any. All you girls sit around and talk about each other's clothes, and Tom and I will walk around and look at you."

# Fat Starvation

THE digestion and absorption of the ordinary food-fats is almost impossible in consumption and wasting diseases generally. The result is fat starvation, as seen by excessive emaciation, paleness and weakness.

Hydroleine presents a predigested, pure Norwegian cod-liver oil, acceptable to any stomach, and really liked by most patients. It puts on weight steadily, restores the fat-digesting function, checks lung destruction, increases flow of bile, and improves the general health.

Sold by druggists generally.

Samples free to physicians.

THE CHARLES N. CRITTENTON CO.


SOLE AGENTS FOR THE UNITED STATES

115-117 FULTON STREET, NEW YORK

THE ALKALINITY OF BLOOD SERUM

## GLYCO-THYMOLINE

(KRESS)



Birmingham Nasal Douche.

### A PURGATIVE For Mucous Membrane

INDICATED IN ALL CATARRHAL CONDITIONS, ESPECIALLY

### NASAL CATARRH

"Glyco-Thymoline (Kress) is well adapted for the treatment of catarrhal conditions of the mucous membranes. I have frequently employed it with benefit in nasal, buccal and bronchial affections. Direct local medication is of much advantage in these cases. In some instances we may safely depend on topical measures alone; in those where internal treatment is also necessary, Glyco-Thymoline (Kress) proves an excellent adjuvant."

MEDICAL BULLETIN, Phila., Pa., March, 1899.

**SPECIAL OFFER**

A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges. K & O Douche to physicians, 15 cts.; \$1.50 per doz. Retail 25 cts. Remit stamps.

**KRESS & OWEN COMPANY, Chemists, 221 Fulton Street, New York**

**HASTENS RESOLUTION AND FOSTERS CELL GROWTH**

No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.

### Standard Goods of a Standard House.

G. W. Flavell & Brother, of Philadelphia, are manufacturers of a class of articles which have established an enviable reputation. Their products afford support in a number of distressing conditions which make life burdensome, and certain of which, indeed, are capable of cutting life short without much delay. Flavell's elastic trusses, elastic stockings, abdominal supporters and uterine supporters are well known to the profession, as they are not articles of yesterday, but have been used with benefit by numberless patients and have been before the public for many years. They utilize the principle of elastic support; an assistance, that is, which yields with the movements of the body, but which is always active within proper, safe and desirable bounds. A truss which is too rigid may cause pain without accomplishing any good result. Such an apparatus will inevitably be rejected soon by the wearer, who is apt, at the same time, to abandon altogether a belief in effective support. Such an article, however, as is offered by the firm named can be worn without any discomfort, while it nevertheless keeps the loop of intestine within its natural abode. The same principle applies equally to elastic stockings for the relief of varicose veins. As these are sufficiently common in consequence of prostrating diseases, such as typhoid fever, and as a result of obstructed circulation, due, for instance, to the impregnated womb, there are vast numbers who are ready to appreciate a device by which they may at least be decidedly relieved. Such alleviation may be obtained by constant use of these stockings.

The abdominal supporters appeal to those of either sex who, from excessive corpulence or other cause, are afflicted with pendulous abdomens, which are certainly unsightly, but which subject the individual to more serious trouble than mere disfigurement. This supporter allays, to a considerable extent, the dragging and tense sensations which are produced by these unfortunate conditions.

The uterine supporter is an ingenious piece of light mechanism by which prolapsed or bent organs may be prevented from causing trouble due to the displacement.—*Monthly Cyclopedia*.

NOT HIS STYLE.—Hustle Nit: "Say, Willie, why didn't yer take de togs de ol' lady offered yer?"

Blinking Blunders: "Wot d' yer take me fer? She said dey wuz de ol' man's workin'-clothes."—*Judge*.

THE CINEMATOGRAPH AS CLINICAL INSTRUCTOR.—At the last meeting of the British Gynecological Society, Dr. E. Doyen, of Paris, gave a demonstration lecture of gynecologic operation by means of the cinematograph. Fourteen slides, among others, were shown, explaining the steps in an ovariectomy and the working of the lecturer's lever clamp-forceps and twenty-four slides illustrative of his methods of abdominal hysterectomy. The demonstration was considered by many of those present to show that the value of the cinematograph, by exhibiting to hundreds a procedure which, in an operating theatre only half a dozen people can see properly, may become very great in the teaching of operative surgery.—*The Philadelphia Medical Journal*.

HER DEAREST FRIEND.—May: "Jack was saved by a bullet striking my picture, which he carried in the breast pocket of his tunic."

Lucy: "Is that so? Well, I should say your picture would stop a four-inch shell."  
—*Stray Stories*.

### Ideal Hepatic Stimulant.

Peacock's CHIONIA gave me the best of satisfaction, and is an ideal hepatic stimulant. I now keep it on hand all the time, as I have constant use for it.

WM. M. YOUNG, M. D.

McLean, Ill.

SAD STATE OF AFFAIRS.—Mrs. O'Toole "Phat's this Oi am tould about thim thryin' to have the saloons closed on Sunday, Phelim?"

Phelim: "Begorra, they say that it's a fact; bad 'cess to thim, says Oi."

Mrs. O'Toole: "The meddlin' haythin! Be jabbers, Phelim, me jewel, they will be ather thryin' to prevint a fray-born American from batin' his woife ef we don't watch the elections close."—*British American Citizen*.

### Senile Heart.

I use Cactina Pillets in heart trouble, and in one case of an old lady, 87 years of age, it worked wonders.

S. W. SHEPARD, M. D.,  
Troy, Pa.

A sick man expressed a desire for some apple dumplings, and his wife made a dozen. A little son sat by the bedside watching the dumplings disappear one by one. After eleven had been devoured, the boy said: "Pa, can I have a dumpling?" And the invalid, biting into the last of the toothsome delicacies, said: "Go away, my son; your father is sick."

**The success of the present-day treatment of nervous exhaustion, malnutrition and general debility is largely due to**

**GRAY'S**  
GLYCERINE  
**TONIC**  
COMP.

**It has become the Standard Remedy.**

**THE PURDUE FREDERICK CO., No. 15 Murray St., New York.**

**No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.**



### Twelve-Year-Old Ulcer Healed with Applied Blood, without Skin Grafting.

Mike L.; age 57, Irish. Diagnosis, ulcer of left leg. Admitted to hospital March 3, 1902. This condition was of about twelve years' standing, and during that time had never entirely healed. He had been treated at various hospitals and at various clinics and by private physicians, but said that he got no special relief. The ulcer was a large one situated on the calf of the leg, being 4 by 3½ inches. It was covered with unhealthy granulations, which exuded a foul-smelling purulent discharge. The surface of the ulcer was thoroughly cleaned up with a dermal curette and dressed with a wet Thiersch pack. This was kept wet and not changed in twenty-four hours. At the end of the twenty-four hours this dressing was removed, the wound thoroughly cleansed with bovine and hydrozone reaction, followed by Thiersch irrigation, and dressed with bovine pure. The bovine dressings were changed twice in twenty-four hours, and the patient got a wineglassful of bovine internally, every three hours. March 23d, the ulcer had healed with the exception of a small space at the upper periphery. This was touched up with a 25-per-cent. solution of pyrozone, and dressed with bovine pure; the dressings being renewed twice in twenty-four hours. March 30th, the patient was discharged cured, the ulcer having become covered with healthy skin, and no scar tissue, it being almost impossible to tell it from the surrounding skin, the only difference being that it was a little redder.

"Invaluable in Insomnia."

STATE REFORMATORY,

HUTCHINSON, KANSAS, Dec. 21, 1898.

JOHN B. DANIEL, Atlanta,

*Dear Sir:*—Will you send three bottles Daniel's Passiflora to Mrs. Maria Stone, 936 Centre Street, Syracuse, New York. She is a patient of mine and I want her to be sure of the genuine article. Express it to her and send bill to me, or draw on me at sight for same and I will remit at once, or protect draft.

Respectfully, etc.,

A. M. HUTCHINSON, M. D.

I use large quantities of it at the State Reformatory here. It is invaluable in insomnia.

A. M. H.

The attention of physicians is directed to the preparations offered by Messrs. Victor Koechl & Co. in their advertisement in this number.

### Modern Methods.

Progress in the treatment of diseases of women has kept pace with the advances made in general medicine. The physician who subjects a patient suffering from endometritis, vaginitis, leucorrhea, etc., to the disagreeable tamponing of the vagina with boro glyceride, etc., will find her leaving him for the modern and up-to-date practitioner.

Micajah's Medicated Uterine Wafers are astringent, antiseptic and alterative, and, when inserted into the vaginal canal up to the uterus, slowly disintegrate and offer a treatment for the above conditions which is most effective and satisfactory to the patient and doctor alike. No powder to spill nor water to soil the clothing.

Write Micajah & Co., Warren, Pa., for samples.

HER PIECE DE RESISTANCE.—Mr. Fraidover: "I don't dare bring any of the fellows home unexpectedly, because I never know what my wife may have for dinner."

Mr. Bravitout: "Oh, I always know what my wife will have, because in a case of that sort she invariably has the same thing."

Mr. Fraidover (interestedly): "And what is that?"

Mr. Bravitout: "A fit."

HAPPY LITTLE BIRDS.—Fair Visitor (to convict): "I suppose, sir, that the singing of the birds relieves the monotony of your dreary life?"

Convict (profoundly nonplussed): "The singing of the birds, miss?"

Fair Visitor: "Yes, sir; the little jail-birds, you know. They must be such a comfort to you."

### Sanmetto in Cystitis, Gonorrhea and Irritable Prostate.

I have been an extensive user of Sanmetto for a number of years, and can truthfully say that when the therapy of the pure santal and saw palmetto is indicated, I find Sanmetto a remedy par excellent. I have used it extensively in cystitis, chronic gonorrhea and irritable prostate, and it has universally relieved, if not cured, my patients. As long as it maintains its present standard of purity I shall use it, for I deem it pure and ethical.

W. R. HILLEGAS, M. D.

Chicago, Ills.

Within its field of indications Pepto-Mangan (Gude) has always been one of my favorite remedies.

DR. M. PFAUNDER,  
Medical Instructor; Assistant Physician.  
Graz, August 10, 1901.

Preparation—Par Excellence

**“ Fellows’**

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**Syrup of Hypophosphites”**

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CONTAINS

Hypophosphites of

Iron,	Lime,
Quinine,	Manganese,
Strychnine,	Potash.

Each fluid drachm contains Hypophosphite of Strychnine equal to 1-64th grain of pure Strychnine.

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**Offers Special Advantages**

in Anaemia, Bronchitis, Phthisis, Influenza, Neurasthenia, and during Convalescence after exhausting diseases.

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*Dr. Milner Fothergill wrote:* “It (Fellows’ Hypophosphites) is a good all-round tonic, specially indicated where there is **NERVOUS EXHAUSTION.**”

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***SPECIAL NOTE.***—Fellows’ Hypophosphites is *Never sold in Bulk*, and is advertised only to the Medical Profession. Physicians are cautioned against worthless substitutes.

Medical letters may be addressed to

MR. FELLOWS, 26 Christopher St., New York.

LITERATURE OF VALUE UPON APPLICATION.

No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.

**Seemingly Astounding, Yet Usual.**

Dr. R. C. Burrow, of Maxon Mill, Ky., gives the following experience:

Miss L. H. had been confined to her bed for three months, suffering with malarial fever. When I was called, I found fever broken, but patient had hardly strength enough to sit up. As she had never menstruated, her mother thought this, in a great measure, the cause of her trouble. After three months' treatment she was again in fairly good health, her menses also appearing, but very painful and scanty. I rested treatment for three months more, hoping that good nourishment and nature would re-establish all functional activity. Her suffering, however, grew worse at each menstruation. I then prescribed Ergoapiol (Smith), one capsule four times a day, beginning three days before the expected period. This treatment gave immediate relief and resulted in regular and perfect menstruation. It is now four months since the administration with Ergoapiol (Smith) has been stopped, and she has had no indication of the previous trouble.

Mrs. C., married, had severe attack of La Grippe last winter. Had not menstruated for the past four months. I prescribed Ergoapiol (Smith), one capsule every three hours. Menses appeared on the third day, and again at the last menstrual period.

Mrs. F., married, consulted me in January. Said she had not menstruated for two months. I suspected pregnancy and declined to treat her. She called again in May and declared positively she was not pregnant. I then prescribed one capsule of Ergoapiol (Smith) before meals and two at bed-time. Menses appeared on the third day.

B. S., single, teacher. Menstruation began at the age of thirteen. Each period, however, was accompanied with the most excruciating pain, compelling her to take to bed for two and three days. This patient, who was large and in good health, said menstruation was free enough and all would be well but for the terrific pain which usually set in after menstruation had started. While attending school last spring, the pains at each period were particularly severe, resulting in convulsions each time. Her physician advised her to discontinue teaching and return home, which she did. During her last menstruation I prescribed Ergoapiol (Smith), with the happy result of no pain or inconvenience whatever, and she is again attending her regular duties.

HOGAN'S NERVE—"I hear Hogan is sick," said the barber.

"Yes, but he's better now," said the bailiff,

"He went to a doctor, who looked him over and then wrote out a prescription."

"How much will that cost, doc?" asks Hogan.

"About a dollar and a half," says the doctor.

"Have you got that much to loan me, doc?" says Hogan.

"The doctor took the prescription back and crossed off all of the items except 'aqua pura.'"

"You can get that for ten cents," he says, handing it back to Hogan; "and here's a dime."

"Don't I have to take those things you scratched off?" says Hogan.

"No," says the doctor. "Those are nerve tonics. You don't need 'em."

**GAIN OF ONE TO THREE POUNDS A WEEK. IDEAL TONIC IN ALL WASTING DISEASES.—**

I find that Manola is very efficient in wasting and debilitating diseases. It hastens elimination of waste products in phthisis, loosens expectoration, eases and loosens coughs, relieves irritations of mucous membranes. Being an eliminating agent, it is valuable in anæmia, by removing worn-out and broken-down tissues from the system. It invariably puts on healthful flesh at the rate of one to three pounds a week.

Respectfully,

Kirby, Ohio. E. E. BURNS, M. D.

DR. J. NOWACK,

Professor at Royal University, Vienna:

"If a dose of the Syrup is administered in a glass of wine or water an hour before going to bed the patient goes to sleep quietly without any excitement. I can recommend Fellows' Hypophosphites to all medical men in cases of sleeplessness."

OF PRACTICAL BENEFIT.—"What has become of Brown? The last time I saw him he had water on the brain."

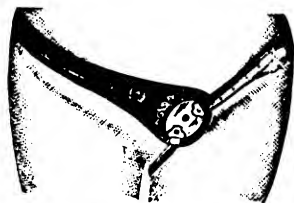
"He's at the head of a reservoir company now."

I have tried Chloretone as a substitute for morphine with much gratification to both my patients and myself. By keeping them on Chloretone continuously, 20 to 30 grains daily, would make a marked reduction in the amount of morphine necessary for previous daily use.—CHAS. LONG, M. D., Toledo, O.

H. S. Reeser, M. D., of Reading, Pa., writes: "In Glyco-Thymoline the practitioner has a preparation of great value. It is non-toxic and unirritating, distinctly alterative, antiphlogistic, deodorant and antiseptic. On tampons in utero vaginal catarrhal conditions it is superior to ichthyol, glycerite of tannin, iodine, etc., and also possesses the advantage of being much cleaner."

## Flavell's Elastic Trusses,

Can be Worn Day and Night.



PNEUMATIC PADS.

Give circumference of abdomen on line of Rupture. State if for Right or Left.

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B. Fine 2.00

- C. Silk 2.50

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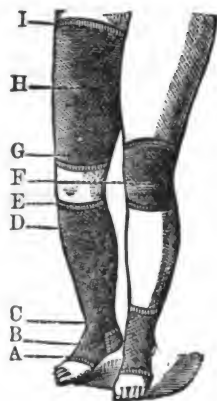
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- B. Fine 3.00

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Give exact Circumference and Length in all cases.



### NET PRICE TO PHYSICIANS.

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A to E	\$2.50	\$2.00	\$1.50
A to G	4.25	3.50	2.50
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E to G	1.50	1.25	1.00
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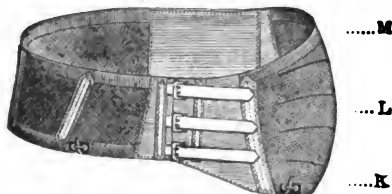
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## ABDOMINAL SUPPORTER.

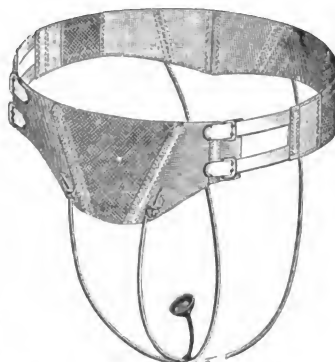
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Give measure 3 inches below Navel. State if for Prolapsus, Retroversion, or Anteversion.



NET PRICE FOR PHYSICIANS

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In the beautiful village of Cornish, one of its finest residences, together with a first-class practice of 30 years' duration. One of the finest and most desirable opportunities in the State of Maine. "Give it early attention."

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Cornish Village, Me.

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## STATE SOCIETIES.

**Maine Medical Association.**

ORGANIZED IN 1853.

*President*, Hiram Hunt, M. D., Greenville.  
*Secretary*, C. D. Smith, M. D., Portland.  
*Treasurer*, Aug. S. Thayer, M. D., 89 Free St., Portland.  
 Next Annual Meeting will be held in Portland on the first Wednesday, Thursday and Friday in June, 1903.

**Maine Academy of Medicine and Science.**

ORGANIZED IN 1894.

*President*, E. M. Fuller, M. D., Bath.  
*Secretary*, Daniel Driscoll, M. D., Portland.  
*Treasurer*, H. F. Twitchell, M. D., 10 Pine St., Portland.  
 Meets on the second Monday evening of each month at 1.00 o'clock, from November to April inclusive, at the Maine Eye and Ear Infirmary.

**Maine Pharmaceutical Association.**

*President*, Frank R. Partridge, Augusta.  
*Secretary*, M. L. Porter, M. D., Danforth.  
 Next Annual Meeting in Portland, July 8, 9, 10, 1902.

**Maine Dental Society.**

ORGANIZED IN 1865.

*President*, A. W. Haskell, Brunswick.  
*Secretary*, H. A. Kelley, Portland.  
 Next Annual Meeting will be held in Brunswick on the third Tuesday and Wednesday in July, 1900.

## COUNTY MEDICAL SOCIETIES.

**No. Arcoostook Medical & Surgical Society.**

ORGANIZED IN 1883.

*President*, W. E. Sincok, M. D., Caribou.  
*1st Vice-President*, F. A. Hanson, M. D., New Sweden.  
*2d Vice-President*, F. D. White, M. D., Limestone.  
*Secretary*, W. G. Chamberlain, M. D., Fort Fairfield.  
*Treasurer*, Jefferson Cary, M. D., Caribou.  
*Standing Committee*, W. E. Sincok, M. D., of Caribou; H. F. Kallioch, M. D., of Fort Fairfield; S. W. Boone, M. D., Presque Isle.  
 Meets four times a year at Caribou, Me.

**South Arcoostook Medical Association.**

ORGANIZED IN JULY, 1901.

*President*, Robert Boyd, M. D., Linneus.  
*Vice-President*, Chas. E. Williams, M. D., Houlton.  
*Secretary*, Fred W. Mann, M. D., Houlton.  
*Treasurer*, Harry L. Putnam, M. D., Houlton.  
 Meets once in three months in Houlton.

**Androscoggin County Medical Assoc'n.**

ORGANIZED JAN. 1, 1868.

*President*, O. A. Sprague, M. D., Turner.  
*Secretary*, A. A. Cobb, M. D., Auburn.  
*Treasurer*, R. R. Ricker, M. D., Lewiston.  
 Meets on the first Tuesday of each month at Central Maine General Hospital, Lewiston, Me.

**York County Medical Society.**

ORGANIZED IN 1891.

Meets quarterly, second week in January, April, July and October at Saco or Biddeford.

*President*, A. H. Weeks, M. D., Bar Mills, Me.  
*1st Vice-President*, H. I. Durgin, M. D., Eliot.  
*2d Vice-President*, C. W. Blagden, M. D., Sanford.  
*Secretary*, L. E. Willard, M. D., Saco.  
*Treasurer*, J. S. Barker, M. D., Kennebunk.

**Kennebec County Medical Association.**

ORGANIZED IN 1883.

*President*, E. P. Marston, M. D., Monmouth.  
*Vice-President*, D. E. Parsons, M. D., Oakland.  
*Secretary and Treasurer*, Wellington Johnson, M. D., Augusta.  
*Standing Committee*, W. P. Giddings, M. D., Gardiner; G. C. Parker, M. D., Winthrop; L. G. Bunker, M. D., Waterville.  
*President and Secretary, Ex officio.*  
 Annual Meeting in May at Augusta. Special meetings called by the standing committee as the interest of the Association may demand.

**Penobscot County Medical Association.**

ORGANIZED IN 1854.

*President*, W. L. Hunt, M. D., Bangor.  
*1st Vice-President*, C. P. Thomas, M. D., Brewer.  
*Sec'y and Treas.*, B. L. Bryant, M. D., Bangor.  
*Executive Committee*, E. T. Nealey, M. D., Bangor; H. T. Clough, M. D., Bangor; E. B. Sanger, M. D., Bangor.  
 Meetings are held on the third Tuesday of each month (excepting June, July, August and September) at the City Hall, Bangor.

**Somerset County Medical Association.**

ORGANIZED IN 1864.

*President*, F. J. Taylor, M. D., Pittsfield.  
*Vice-President*, F. J. Robinson, M. D., Fairfield.  
*Sec'y and Treas.*, H. C. Taggart, M. D., Skowhegan.  
 Meets in June as per call of the Sec'y, at Skowhegan.

**Sebasticook Clinical Society.**

ORGANIZED IN 1897.

*President*, F. J. Taylor, M. D., Pittsfield.  
*Secretary*, E. P. Goodrich, M. D., Pittsfield.  
 Meets at house or office of members on the last Monday of each month from September to May inclusive.

**Franklin County Medical Society.**

ORGANIZED IN 1896.

*President*, A. G. Howard, M. D., Farmington.  
*1st Vice-President*, F. W. Merritt, M. D., Jay.  
*2d Vice-President*, J. W. Nichols, M. D., Farmington.  
*Secretary and Treas.*, H. B. Palmer, M. D., Farmington.  
*Standing Committee*, H. B. Palmer, M. D., Alfred Hitchcock, M. D., Farmington, J. W. Perkins, M. D., Wilton.  
 Meets second Tuesday of June and September.

**Oxford County Medical Association.**

ORGANIZED June 26, 1896.

*President*, J. C. Caldwell, M. D., Buckfield.  
*Secretary and Treas.*, H. L. Bartlett, M. D., Norway.  
 Meetings are held on the last Monday of March, June, September, and December.

**Washington County Medical Association.**

ORGANIZED IN 1897.

*President*, E. H. Vose, M. D., Calais.  
*Vice-President*, S. B. Hunter, M. D., Machias.  
*Sec'y and Treas.*, H. V. Jonah, M. D., Eastport.  
 Meetings subject to the call of the officers.

**Piscataquis County Medical Association.**

ORGANIZED IN 1896.

*President*, R. H. Marsh, M. D., Guilford, Me.  
*Secretary*, C. W. Ray, M. D., Sangerville, Me.  
 Meets at Dover, Me., the third Thursday in February May, August and November.

## LOCAL MEDICAL SOCIETIES.

**Portland Medical Club.**

ORGANIZED IN 1876.

*President*, C. Y. Lord, M. D., Portland.  
*Secretary*, W. H. Kimball, M. D., Portland.  
 Meets on the first Thursday evening of each month from September to June inclusive at the house or office of members.

**The Clinical Club.**

ORGANIZED IN 1878.

*President*, S. H. Weeks, M. D., Portland.  
*Secretary*, O. O. Hunt, M. D., Portland.  
 Meets at the house or office of members, monthly from September to May.

**Lister Club.**

ORGANIZED IN 1892.

*President*, H. H. Brock, M. D., Portland.  
*Secretary*, Chas. D. Smith, M. D., Portland.  
 Meets at the house or office of members on third Monday of each month throughout the year.

**The Pathological Club.**

*President*, W. L. Cousins, M. D., Portland.  
*Secretary*, R. D. Small, M. D., Portland.  
 Meets once a month.

**The Saco and Biddeford Medical Club.**

ORGANIZED IN 1888.

*President*, C. W. Pillsbury, M. D., Saco.  
*Secretary*, L. E. Willard, M. D., Saco.  
 Meets on the first Thursday of each month at the house or office of members.

**Waterville Clinical Society.**

ORGANIZED IN 1893.

*President*, J. L. Fortier, M. D., Waterville.  
*Secretary*, E. W. Royer, M. D., Waterville.  
 Meets on the third Monday of each month.

**Bar Harbor Hospital Club.**

ORGANIZED IN 1899.

*President*, William Rogers, M. D., Bar Harbor.  
*Sec'y and Treas.*, John B. Shober, M. D., Philadelphia.  
 Meets fortnightly during Summer.

# Journal of Medicine and Science.

ISSUED ON THE TENTH OF EACH MONTH.

In the Interests of Public Health, and in order that the People of Maine may reap the great Benefits, both hygienic and economic, assured by a judicious Application of the Principles of Preventive Medicine, this Journal supports the following Propositions and urges Physicians and Laymen to work diligently to further their Consummation.

- 1st. The Establishment of a Sanatorium for the Treatment of the Consumptive Poor.
- 2nd. The Abolishment of the Coroner System and the Appointment of Medical Examiners.
- 3rd. The daily Inspection of School Children by School Physicians.
- 4th. The more liberal Endowment of our Medical Schools by private Charity, and the voting of larger Appropriations to our State and Local Boards of Health.
- 5th. The Establishment of a State Bacteriologic Laboratory.

For, surely, health is the prime essential to success in life, and the health of the people is the foundation upon which all their happiness and all their power depends.

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Vol. VIII.

PORTLAND, MAINE, NOVEMBER, 1902.

No. 12.

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## Analysis of the Stomach Contents.

By JOSEPH P. BODGE, M. D., of Portland.

**B**EFORE dealing with the chemical examination of stomach contents, a brief statement of the physiological facts of gastric digestion may be serviceable.

Stomach digestion is carried on by means of a mineral acid, a proteolytic ferment, and a coagulating ferment; namely, hydrochloric acid, pepsin, and rennin, which constitute the active principles of the gastric juice. Practically, the gastric juice affects only the proteids, or the albuminoids of the food. Gastric juice is secreted in small quantities, even when the stomach does not contain food; but the presence of food acts as a prompt stimulus to an abundant formation. The least excitation is produced by starches and fats. Proteids have the greatest stimulant action. Formation of hydrochloric acid begins directly after taking of food, and combines with the proteids and mineral salts of the food to form acid proteids and acid salts. As soon as the chemical affinities of the original food proteids and salts have been satisfied, free hydrochloric acid may be found.

Under the influence of the free acid, pepsinogen and chymosynogen secreted by the gastric glands are transformed into pepsin and rennin. The only action of the rennin is to coagulate the caseine of milk. The

hydrochloric acid and pepsin act together, changing the proteids and coagulated caseine into, first, albumoses, finally into peptones. Then, at the height of digestion, in a normal stomach, an analysis will show the presence of free hydrochloric acid, acid salts, pepsin, rennin, albumoses, and peptones.

The object of the examination of the gastric juice is to determine the presence, and in some cases the amount, of certain of these constituents, and to ascertain whether certain other substances are present which are not produced by the normal stomach. The principal substances which should not be found, except as they, or their salts, have been introduced as a part of the ingested food, are lactic, acetic, and butyric acids. These acids are formed in large quantities under certain pathological conditions, which produce fermentation of the ingested food. The churning power of the stomach, and its ability to expel the products of gastric digestion is also to be determined, and a certain degree of information is to be obtained from a microscopical examination of the material obtained by the stomach tube. The gastric juice is usually not secreted in a sufficient quantity for analytical purposes unless the stomach contains food. The amount and time of appearance of the ingredients of the secretion will vary normally according to the quantity and quality of the food taken. Hence, for purposes of analysis and com-

parison, it is necessary to give a definite quantity and quality of food, and to withdraw the contents of the stomach at a definite period of digestion. Hence the utility of the various test meals which have been devised. Of these the most useful is Ewald's test breakfast.

This consists of two slices of dry bread, weighing 1 to 2 oz., and 9 to 12 oz. of water. It is taken in the morning, no food having been ingested since the previous evening. Between an hour and an hour and a half after the meal the contents of the stomach are to be withdrawn. This test meal is usually sufficient in all cases except those in which there is suspected gastric cancer. In the latter case the Boas's test breakfast should be employed. This meal consists simply of oatmeal soup, prepared by adding a tablespoonful of oatmeal to 1 quart of water, and boiling the whole down to one pint. Nothing is to be added with the exception of a little salt. The gastric contents should be removed in an hour or an hour and a half afterwards. In all cases of disease which require an examination of the stomach contents, the following questions are to be answered:

What is the reaction?

Is free acid present?

If present, is it hydrochloric or lactic, or both?

If hydrochloric, how much?

Has the gastric juice normal digestive power?

Under certain circumstances it may be further necessary to determine the amount of combined hydrochloric acid, organic acids, and acid salts, the presence of lactic and butyric acids, and the presence of rennin.

The reaction is tested with litmus paper. Normal gastric juice is always acid because of the free hydrochloric acid which it contains; and when obtained by the tube it is almost invariably the same in pathological conditions due to the presence of lactic and fatty acids. Vomited material may be neutral or alkaline in rare pathological conditions where there is a large mixture of mucus.

If the contents are acid, is the acidity due to free acids or combined acids or acid salts? To determine this point Congo red is employed, either in solution or as a test paper. The solution and the paper are dark red in color. A drop or two of the solution is added to a little of the gastric juice or a strip of the paper is moistened with the same. If free acid is present the red color changes to a blue. Combined acids or acid salts do

not cause the color to change. If free acid is present, is it hydrochloric, lactic, or both?

The reaction with Congo red paper simply declares the presence of a free acid. The free acid may be hydrochloric, lactic, acetic, or butyric. The two former are the most important. The simplest test for free hydrochloric acid is known as the Resorcin Test. The reagent consists of resorcin, 75 grs., cane sugar, 45 grs., 94% alcohol, 3½ oz. Seven or eight drops of this reagent are mixed in a small porcelain dish with an equal quantity of gastric juice and gradually evaporated to dryness by a gentle heat. If free hydrochloric acid is present, a rosy or bright red will appear around the margin of the dried fluid immediately after the evaporation is complete. To determine the amount of free hydrochloric acid a decinormal alkali solution, made by mixing 56 milligrams of potassium hydrate and 10 c. c. of water. Allow this to flow through a burette, drop by drop, into a beaker, containing 10 c. c. of filtered gastric juice, to which has been added, as an indicator, 2 drops of an alcoholic solution of phenol-phthalein. The test is completed when the red color produced no longer disappears on shaking the solution. In the normal gastric juice it requires from 4 to 6 c. c. of the standard alkali solution.

Since one c. c. of the alkali solution is equivalent to .00364 grams of hydrochloric acid, it follows that the percentage of the latter in a given specimen will equal the number of c. c. of the alkali solution required, multiplied by 10 and again by .00364. To ascertain the presence of free lactic acid, Kelling's test is very simple and satisfactory. Place in a test tube 5 c. c. of the gastric fluid, and add 10 times its bulk of water. Treat this mixture with 1 or 2 drops of a 5% aqueous solution of the sesquichloride of iron. If, upon looking at the tube against a white background, the fluid is distinctly green, the presence of lactic acid is assured.

The presence of acetic acid can be determined by its odor, also by the production of a blood red color on the addition of a neutral solution of ferric chloric to an aqueous solution of the ethereal extract which has been neutralized by sodium carbonate. Butyric acid strikes a brownish yellow color with Uffelmann's reagent. Its odor is also characteristic.

The digestive power of the gastric juice and the presence or absence of pepsin may be ascertained by putting about 1 grain of the white of a hard-boiled egg in a test tube with 25 c. c. of filtered gastric juice, and keeping it at a temperature of 100° F.



If the coagulated albumen has been completely digested at the end of 3 hours, it may be inferred that pepsin and hydrochloric acid are present in normal proportions and quantity. If previous tests have shown the absence of free hydrochloric acid, acidulate the gastric fluid by adding 5 drops of the official dilute acid. If, under these conditions, the albumen is digested, it shows that the zymogen of pepsin is present, and has been converted into pepsin by the added hydrochloric acid.

If digestion does not take place after the acid is added, it may be inferred that neither pepsin or zymogen is present and the digestive power is nil. To determine whether the pepsin or hydrochloric acid is present in too great or too small amount, an equal quantity of the filtrate is placed in 4 small test tubes and a disk of coagulated white of egg put into each. To the first, nothing is added; to the second, 2 drops of hydrochloric acid is added; to the third, 5 grains of pepsin is added, and to the fourth, add both hydrochloric acid and pepsin. The test tubes are then placed in an incubator at about 100° F. The rapidity with which the albumen is liquefied in the different tubes will indicate whether digestion would have occurred without having added anything, or whether acid, or pepsin, or both were needed.

The absorptive power of the stomach is determined by the time required for free iodine to appear in the saliva, after the ingestion of potassium iodide. Normally, the saliva should yield the reaction for iodine in from 10 to 15 minutes after the ingestion of a capsule containing 1½ grains of potassium iodide. Care must be taken that none of the drug adheres to the outside of the capsule. To learn the motor power of the stomach, Ewald has suggested the use of salol, which escapes from the stomach into the intestine, where it is broken up into salicylic acid and phenol. Normally, salicylic acid appears in the urine in from 40 to 75 min. After the ingestion of 1 gram of salol, filter paper, moistened with urine containing salicylic acid, assumes a violet color when treated with a 10% ferric chloride solution.

It should be understood that a diagnosis cannot be based solely upon an examination of the stomach contents, as in a certain proportion of cases abnormal findings coexist with an absence of other symptoms.

Every evidence of disease is to be taken into consideration before arriving at a definite conclusion. In the normal findings the reaction is acid. Free hydrochloric acid is present in the proportion of 1 to 2% ; pep-

sin and rennin are present; lactic, acetic, and butyric acids are absent; little, if any, mucus, and only traces of food. In gastric ulcer, total acidity is usually increased; increased free hydrochloric acid; ferments present; lactic, acetic, and butyric acids absent, and it frequently contains blood pigment. In cancer of the stomach free hydrochloric acid is greatly diminished or absent; ferments not infrequently absent; lactic, acetic, and butyric acids present in quantity after a Boas's breakfast; mucus; coffee ground material, and stagnant food.

In dilatation of the stomach, not caused by malignant pyloric obstructions, the total acidity is normal or increased, and free hydrochloric acid commonly increased; ferments present; lactic, acetic, and butyric acids absent; decomposed and undigested food and bacteria.

In acute gastritis free hydrochloric acid is absent; ferments diminished; lactic, acetic, and butyric acids usually absent; mucous and red blood cells are present, and a fluid tinged with green, due to the presence of bile.

In chronic gastritis in the atrophic form, the reaction may be neutral or alkaline; free hydrochloric acid diminished or absent; lactic, acetic, and butyric acids absent; ferments absent; no evidence of digestion. In hyperchlorhydria free hydrochloric acid is greatly increased; ferments normal or increased. The diagnosis should not be made unless the hyper-acidity is persistent.

In hypersecretion, periodic or chronic, there may be the presence of 100 to 1000 c. c. of gastric juice in the fasting stomach.

As this paper treats of the very simplest methods of examination only, and the tests that may be easily carried out by the general practitioner and without a laboratory equipment, the technic of microscopical examination will be omitted.

It may, however, be said that the chemical tests above mentioned are in the vast majority of cases sufficient to admit of a correct diagnosis of gastric disease.


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The following is a very useful tonic, especially in old persons: acidiphosphoric dil., fʒss; strychninæ sulph., gr. ss; glycerini fʒi; elixir. calisayæ ad fʒvi. Dose, one teaspoonful.

Dr. Rumboldt says that hemorrhage from any nasal operation is quickly arrested by spraying vaselin as hot as can be borne into the nostril.

### Septicemia and the Curette.

By H. PLYMPTON, M. D., of Brooklyn, N. Y.

O attempt to break up an old established custom in any line of life is, at best, a thankless job, and one likely to call down harsh criticism upon the head of the daring iconoclast.

To attempt to uproot old prejudices existing in favor of a certain line of practice in surgery, and diametrically oppose such practice, is to invite from some adverse criticism of the harshest kind. The only recompense for this is a logical refutation of, or concurrence in, the argument advanced on the part of other members of the profession.

This latter is what I hope for, and if I provoke a discussion, or start a line of thought in the minds of half of the readers of this article, I shall have achieved all I started out to do.

Curetting the uterus to remove fragments of after-birth or other debris has been taught in our medical schools from time immemorial, and it is firmly fixed in the receptive and retentive mind of every medical student that the first move following any such abnormal uterine condition is to cleanse the uterus by means of the curette.

That the organ should be thoroughly and aseptically cleansed admits of no argument, but that the work should be done with the curette, I deny most emphatically.

The majority of cases of death following the decomposition of fœtus or placenta in utero, are caused by the use of the curette, and I hold that septicemia may be avoided if a more rational procedure be resorted to.

The condition of the uterus containing septic matter is one of great congestion, the thickened walls being coated internally and over the os with a thick, brown, tenacious mucus.

The congestion is active, and therefore the more dangerous in the event of the admission of septic matter into the circulation.

If the curette is used, denuding the walls of their protective covering, an immediate vaccination takes place with a septic virus, septicemia following in an incredibly short space of time (chemical metamorphosis is marvelously rapid in the circulatory system), and death quickly ensues.

If, without using the curette, we can remove the septic matter from the uterus without disturbing the mucous covering, and enable the uterus of itself to expel the coating, we shall have taken a long step forward in the treatment of this class of uterine cases.

The uterus, by reason of its congestion, may be made to perform a self-cleansing act by exciting the exudation of the serum of the blood into its cavity, thereby washing itself out, and expelling all septic matter instead of absorbing it.

This process of exosmosis is induced by a properly combined alkaline solution, at a temperature above 100°, and a strict avoidance of bichloride, carbolic acid, formaldehyde, or any antiseptic of an acid reaction or astringent nature, which would coagulate the fibrine and albumen of the blood.

My method of procedure is as follows:

First, the gentle removal of whatever fragments are lying in the uterine cavity by means of forceps, care being taken not to tear from the walls any adherent pieces.

Second, the gentle flushing of the uterine cavity with the alkaline solution (110°), the reservoir containing the fluid being not more than two feet above the level of the hips.

If the flushing could be continuously administered for a few hours (say two or three), the conditions would be more speedily reduced to normal, but the discomfort of the position of the patient (on a douche pan) prevents this, and a flushing once every two hours with one quart of solution is about the limit of treatment.

For flushing the uterus, I use a small dilating uterine douche, and as there is plenty of room for the escape of fluid and fragments, there is no danger of fallopian colic or salpingitis.

The first flushing is frequently followed by contractile pains and expulsion of any previously adherent pieces, together with much of the mucus.

A tablet of Ext. Cannabis Indica, gr.  $\frac{1}{2}$ . Ext. Ergotin, gr.  $\frac{1}{2}$ , every hour till desired effect is produced will contract uterus and alleviate pain.

The bowels should be moved freely, both by enema and catharsis.

During the interval between douches, the patient should be kept on her back, with the hips sufficiently raised to permit the retention in the vagina of as much of the alkaline solution as it will hold.

The rapidity with which this treatment will reduce temperature, relieve pain, stop vomiting and remove offensive odor is marvelous to one who has not tried it. Sometimes two flushings are sufficient to cleanse the uterus thoroughly, vaginal douches being all that are needed subsequently to complete the work.

Uterine congestion is speedily relieved,

and the uterine discharge changes from brown, thick, bad-smelling mucus, to a thin, transparent one, accompanied or followed by more or less of a flow of blood.

A reduction in the frequency of the flushings is desirable as soon as a tendency to return to normal conditions begins to be observed, as it frequently will within twenty-four hours. Then simple vaginal douches every three hours, with an occasional uterine flushing, if symptoms indicate it.

The action of exosmosis (and endosmosis, for there is every reason to believe in the absorption of some of the fluid) is what is desired to relieve the existing congestion, as in a bronchitis, pneumonia, congestion of kidney, congestion of any mucous membrane, etc., and is the most rational means of restoring to normal condition.

I do not wish to be understood as decrying the use of that most valuable instrument, the curette, but only the abuse of it, to wit: its employment under such conditions as make it practically a sharp weapon loaded with septic matter, dangerous beyond the poisoned arrow of the Malay, or the fang of cobra, and utterly opposed to our modern ideas of antiseptis.

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#### \*The Relation of Obstetrics to Gynecology.

By SETH C. GORDON, M. D., Portland, Me.

**M**ODERN Gynecology is the legitimate child of ancient Obstetrics. Marion Sims was the accoucher and Emmet, Thomas, Peaslee and Bozeman may fairly be said to have been the godfathers, while the child is kept alive—for alive it certainly is—in spite of more or fewer sins of omission, as well as of commission, of the modern accoucher. It has been the custom of late years to say that gynecology has passed its usefulness and has become merged into general surgery, and that there no longer exists a necessity for attempting to prolong the life of this hopelessly doomed department of medicine. With this proposition we take issue, and shall endeavor to maintain that, until modern obstetrics approaches more nearly the ideal standard, there will be a large field for the gynecologist proper.

Marion Sims found a condition among negro women which practically disabled them for all the duties of life, thus materially re-

ducing their commercial and industrial value. In vain had the profession striven for years to heal the vesicovaginal fistula; not even had a relief been found for the pitiable, hopeless and helpless victim of this abnormal performance of a function so necessary to comfort, both of body and of mind. Endowed with a heart keenly alive to the claims of suffering humanity, and with a zeal for scientific investigation almost unparalleled in the history of the noblest of professions, with the most patient perseverance he contended against innumerable failures, hoping almost against hope, until he was rewarded at last by a result that conferred a priceless boon upon thousands of women and won for himself imperishable renown throughout the civilized world, so that he became *facile princeps* among the benefactors of his time.

We may then fairly claim that scientific gynecology had its birth in America and was founded by Marion Sims. No gynecologic surgery prior to his day had made any impression on surgical practice that has endured until the present time. His speculum, silver wire suture and methods of plastic work gave to the profession means for exploring the genital tract and perfected a surgical technic hitherto unequalled. Not alone as a strict gynecologist did he contribute to his fame throughout the world, but his suggestions and predictions in relation to abdominal surgery, especially regarding gunshot wounds and removal of gallstones, placed him among the most advanced general surgeons of his day. But what was strictly gynecologic and what entitles him to the appellation of Father of Gynecology was his success in the treatment of vesicovaginal fistula. That a large percentage of these lesions was due to ancient obstetrics no one doubts, certainly no teacher of the art questions it. "Meddlesome midwifery" was the keynote sounded by all the instructors during the latter part of the eighteenth and the early part of the nineteenth centuries. Not only were the students taught that frequent examinations were bad, but that manual interference should be cautiously used. Forceps were only a *dernier ressort*, for experts. Parturition was a natural physiologic process, not to be hurried, not to be shortened by any artificial means, and its pangs and agonies not to be soothed or ameliorated by any seductive drugs. Even when the blessing of anesthesia was invoked, the anathemas of the church were hurled against the accoucher, and members of his own profession cried out against him for attempting to assuage the anguish of the suffering woman. It was at variance with the

\*The Presidential Address, read before the American Gynecological Society, at Atlantic City, N. J., May 27, 1902.

divine authority that "in sorrow thou shalt bring forth children."

Such teaching and such public sentiment led to most disastrous consequences to the parturient woman. The long labor, delayed during the second stage, especially from disproportion between pelvis and head, produced necrosis of tissue and its calamitous result. This was clearly the fault of the obstetrician of that day and generation, and was corrected only after the careful investigations consequent upon Sims' painstaking gynecologic work. Reform in the management of labor began from that time, and just in proportion as the reform was successful the number of cases of vesicovaginal fistula decreased, until at the present time it is almost unknown, even in our largest hospitals. The leading instructors in obstetrics taught the intelligent use of forceps in lingering labors, and, *pari passu* with this intelligence, the lesion was largely eliminated from the list of injuries in childbirth.

Prior to this time all that was known of gynecology was included under the head of obstetrics, and for many years all the teaching in relation to women that was received by the medical student came from the professor of obstetrics and diseases of women, the latter subject playing but a minor part in the curriculum. In many schools this professor was continued years after gynecology was a well-recognized department of medicine, and no practical instruction whatever was given. Many of these professors of "obstetrics and diseases of women" never did a gynecologic operation of any kind, therefore their teaching, like their practice, was purely theoretic; students graduated from such schools necessarily knew nothing of practical work, having seen none, and, as a consequence, the ambitious young surgeon either attempted plastic operations on the uterus and vagina with knowledge gained only from text-books or qualified himself as well as he might by a few weeks at some metropolitan post-graduate school.

In the early days of gynecology, however, these schools did not exist, but hundreds of physicians availed themselves of the clinical advantages afforded by the Woman's Hospital in New York and sat at the feet of that Gamaliel of the profession, Thomas Addis Emmet, learning wisdom from his words and skilful technic. While we retract nothing that has been said for Sims as the Father of Gynecology, to Emmet belongs much credit for the concise, plain, practical manner in which he placed before the profession his careful, painstaking work in plastic surgery

of the generative organs. That which the keen, brilliant genius of a Sims made possible, the intelligent, patient, practical common sense of an Emmet made probable to every afflicted one of womanhood. The field was wide, and from all parts of the country came the sufferers from childbed injuries, many of which were due to the faulty obstetric work of that day.

Among the causes were: First, long-delayed use of forceps; second, careless and needless use of forceps; third, a disregard of the accidents that occurred, and lastly, a total lack of aseptic precautions during the progress of labor.

From the first came the lesion already alluded to, vesicovaginal fistula, while from the second came the lacerations of uterus and perineum, many of which could have been remedied had the accoucheur regarded them at all, and treated them according to the best known surgical principles. The great fault lay in entirely ignoring such accidents. It was no uncommon thing for old practitioners to assert in the most positive manner that in their whole lifelong experience they had never seen a laceration of the perineum. If the statement was true it is evident that no observation was made, for the careful examination by the gynecologist detected the grossest lesions, not only partial but complete ruptures, occurring in the practice of these proud boasters.

These are trite and hackneyed themes to the Fellows of this Society, but they are the evidences of the influence of gynecology upon the practice of obstetrics, for when once they were made known to the profession generally a new light dawned upon the obstetrician and a new incentive was given, at least to more careful habits of observation. Gynecology thus, in turn, became the parent of a new obstetrics, and under the eloquence of that "silver-tongued" orator of the profession, T. Gaillard Thomas, to whom thousands of students and practitioners listened with a fascination rarely equalled in didactic teaching, the new department of medicine commanded the earnest attention of the profession throughout the civilized world.

For a long time the text-books of Emmet and Thomas were standards for all that was best in the new science, and they remain and will continue to be the classics in gynecology.

As a teacher Thomas had no superior, and this teaching faculty he carried especially into his text-book. While detailing his methods of operating in the simplest manner, he omitted nothing that was necessary for a clear understanding on the part of the dili-

gent student. He gave due credit to Sims and Emmet for all they had done before him, claiming nothing as original with himself unless fully justified in so doing. He was always the gentleman and scholar in his profession. While asserting his opinions in a graceful and earnest manner, he was not dogmatic to a degree that prevented him from retracting any views entertained when he became satisfied that they were not well founded.

Among the early operators for ovarian tumors, he did much to advance abdominal surgery, which has now become a part of the field of the general surgeon. No man criticised more severely the obstetrician of his day than did Thomas. He says: "When it shall become the duty of the obstetrician, as it surely soon will under the influence of advancing knowledge, before relinquishing the care of a recent delivered woman, to inform himself as to the existence of laceration of the cervix or perineum; when the false and vicious doctrine of undervaluing or ignoring these grave accidents is silenced forever, and when a neglect of their early repair by surgical resort shall be regarded as a flagrant dereliction, then the number of women affected by pelvic disorders will become suddenly and wonderfully diminished. The time for this is now at hand, and the profession everywhere should raise its voice in a matter of preventive medicine as important as that of infectious diseases."

He thought twenty years ago that "Creating harmony by blandness of manner and well-turned compliments do not constitute a competent obstetrician. These are the practitioners who, day by day, year after year, send forth women with lacerated cervices and ununited perineums, to furnish to the gynecologist of the future cases of uterine engorgement, leucorrhea, prolapsus and other displacements, cystitis and a long list of pathological states which will cling to them for life, sapping their usefulness and destroying their households."

Perhaps few men in the profession have given more study and careful, practical attention to both obstetrics and gynecology than Thomas, for he was fairly entitled to be numbered among the experts in each department. Twenty years ago he wrote on these two subjects as follows:

"So intimately are gynecology and obstetrics connected, in reference to this subject, that a few words upon its relations to the latter will not be inappropriate. It is no exaggeration to say that a very large proportion of female diseases take their

origin in the mismanagement of the lying-in chamber. If this be so, and no gynecologist will deny it, to the obstetrician the importance of the perineum in this connection cannot be exaggerated. Its rupture furnishes one of the most fruitful sources for absorption of septic elements, and I do not hesitate to say that thousands of women suffer throughout their lives from uterine displacements, engorgement and vesical and rectal prolapse in consequence of injuries inflicted upon it during the parturient act."

Such teaching as this undoubtedly had its influence upon the profession all over the country and resulted in diminished mortality, while at the same time more care was taken of the various injuries and accidents that were inevitable, even under the best management by accomplished and competent accoucheurs. And yet the ideal in obstetrics has not been reached. Theory and practice are still very far apart. What we may know and what we may do, both in morals and in science, are sometimes two altogether distinct propositions. We may not, like the country clergyman made famous by Goldsmith, always "point the way to heaven" and "lead the way."

There are many faults yet to be overcome in the practice of obstetrics before the millennium shall dawn for the gynecologist. While our public institutions are doing good work, for the most part, in eliminating germ disease and bringing the mortality almost to the vanishing point, much missionary work needs to be done among the professional men in private practice. The criticisms I would offer are:

First. The too early use of forceps. When the pendulum began to swing from their too rare employment, it went to the opposite extreme of their too frequent use.

A very large majority of cases should and will, if left alone, terminate naturally. It is a matter of small importance how long the first stage of labor continue, if all is normal with presentation and position. It is the second stage in which the harm is done. Twenty-four hours is not a long time for a primipara, especially when the second stage is not more than three or four hours. This time, at least, should be given in uncomplicated cases before the forceps should be used. If pains are not especially frequent or strong, even a longer period in the second stage may be normal. A normal labor should not be interfered with, and the accoucheur who does interfere should be held responsible for accidents to mother or child.

While our predecessors were guilty of sins of omission, our contemporaries are equally guilty of sins of commission. The perineum must be dilated slowly and by degrees, and allowed intervals of rest, whereas, if forceps be applied, a laceration is sure to occur. This is no unusual case, but altogether too common. Too many practitioners give as an excuse that they have not the time to wait, and console themselves with the fact that they can safely repair any accident that may occur. This may be done partially in case of the mother, but too frequently the child suffers as well. No man has a right to practice obstetrics who is not willing to sacrifice his time to the best interests of his patients.

Second. Accidents occurring in labor are not properly repaired at the time. Young men especially have a fear of letting friends know that such accident has occurred, so either nothing is done or a careless repair is made. Every case is a surgical one and must be treated upon the most approved surgical principles, both at the time and until repair is fully established.

The fashion of late seems to be to prohibit antiseptic douches after labor. While these may not be necessary in normal labors with no accidents, lacerations should be kept surgically clean, and this can be done only by frequent irrigation with germicides. Surgical cleanliness on the part of accoucheur and patient, from the beginning of labor until convalescence, alone ensures safety to the one and duty well performed on the part of the other.

As an additional safeguard against laceration of the perineum, I believe the timely employment of anesthetics to be invaluable. It prevents the use on the part of the patient of the voluntary muscles, which do much to cause this accident. If she be entirely unconscious, this element is eliminated. Aside from this, the suffering should be considered and relieved, even as a prophylaxis against future complications. I endorse fully what was said on this point by one of the distinguished Presidents of this Society, Dr. Reynolds, in his annual address: "I find it hard to excuse our growing supineness in regard to anesthesia in ordinary labor. There are few prejudices more utterly unfounded than our timidity about this resource. Not only does the timely and judicious use of ether in confinement not augment the liability to hemorrhages; it unquestionably lessens this risk by saving that nervous power which the unrelieved endurance of pain exhausts."

My preference in anesthetics is the A. C. E. mixture, given only during the pain. It acts promptly and does not excite the patient. It should be given cautiously by some one instructed by the accoucheur. Post-partum hemorrhage is not due to the use of an anesthetic, but to the carelessness of the attendant. A steady, careful, *persistent* manipulation of the uterine tumor during the expulsion of the child and placenta, continued until a firm contraction is produced, ensures safety in almost every case.

My own experience during professional life fully justifies me in making the assertion that a strict adherence to this rule will nearly always prevent post-partum hemorrhage. It is to be feared that the rule either is not understood, or is "honored more in the breach than the observance." While this may not be considered strictly within the line of discussion marked out in the beginning of this paper, and may seem to have no bearing on gynecology, yet any accident connected with the parturient process must of necessity bear more or less relation to that subject, and is, if not in the line of surgical, certainly in the line of medical gynecology.

The modern methods of Cesarean section have given such good results in diminished mortality that the barbarism of craniotomy has practically ceased, and the morbidity which furnished such abundant gynecologic material has correspondingly decreased.

This great progress is practically due to anesthesia, asepsis and improved technic, and for this we must give credit to the gynecologists who have perfected the operative details of abdominal section, made possible by the discovery of anesthetics and by cleanly surgery. The credit is by no means all due to gynecologists, for obstetricians proper have felt the need of improvement and have given much to the sum total of the good work. Berry Hart, in a review of the obstetrics of the nineteenth century, says, in closing:

"In summing up the general impressions this perfect appreciation of obstetrics gives, we may say that we have pride in the present status of our subject and unbounded hope for the future. The progress in the latter half of the nineteenth century has been most striking. A loyal and determined effort on the part of all obstetric teachers to utilize with unbiased minds their opportunities and influence in the furtherance of scientific research, aided by the enlightened clinical work of the practitioner, might make the new century one of the greatest in the history of obstetrics."



On the other hand, have we as gynecologists kept up to the ideal? Have we kept the faith transmitted to us by the fathers? Nay, more, have we improved upon the methods first made known by the fathers? Or have we departed so far from the practice given us as to merit their disapprobation? It may also be pertinent to the subject under consideration to inquire, Have we as gynecologists made any progress since the early days of the fathers? It would be passing strange if we had not.

Among the many good things taught by Dr. Emmet was the caution against operating upon the vagina and uterus before they were entirely free from inflammation, or, to use his own term, "pelvic cellulitis." We all know how long and persistently he used the glycerin tampon and hot-water douches to get rid of this *bête noire*—many think too long and too persistently—and yet Emmet did not believe in "chronic inflammation," for he distinctly says so. That a certain amount of exudate is left after each acute attack of pelvic peritonitis or cellulitis is well known to all of us; that pain, tenderness, soreness and congestion belong to this condition we also know, but we should understand that this is only a product of inflammation, not inflammation itself. And though Emmet said we should not operate upon these cases while inflammation lasted, it seems that he carried the preparatory treatment too far, or, at least, continued it longer than was necessary. This condition was "chronic passive congestion," a result of the inflammatory process, and not "chronic inflammation," as was taught by most teachers.

Peaslee, who was the most eminent pathologist of his time in America, and indeed had few equals anywhere, taught fifty years ago, and continued to teach as long as he lived, that inflammation was a process and not a condition or state of a part; that it was a short process (only a few days) and always a destructive process, leaving certain products called exudates; such products were either absorbed quickly (by resolution), were infected (resulting in pus), or, lastly, were partially organized, causing enlargement (swelling), heat, pain and redness (where visible). This last impeded circulation in the part affected and gave rise to "chronic passive congestion." This was the "chronic cellulitis" of Emmet, which he spent many months in removing by glycerin tampons and hot douches. He feared to make a trachelorrhaphy or a perineorrhaphy until all of this "thickening and pain" were gone; in short, until the parts were well

and thoroughly prepared for operation. The men that recognized this condition as one of "chronic passive congestion" and not "chronic inflammation" proceeded at once to do trachelorrhaphy and perineorrhaphy, and, when the cervix was free from cysts, the operation was a most pronounced success, for the bleeding at once relieved the condition and the process of absorption began from that time. The hyperplasia of the uterus and vagina soon disappeared, while much time was saved that formerly was occupied by "preparatory treatment." In properly selected cases, with extreme care in the asepsis and curettage of the uterus when needed, the patient did well. If cysts or any purulent infection existed, treatment for these conditions preceded any operation. Laceration of the cervix, especially of long standing, was not always an indication for trachelorrhaphy, destruction or extreme atrophy of tissue of the cervix being a decided contraindication to the operation. Thousands of women suffered much more after the trachelorrhaphy than before. The cervical canal was closed too much, thus drainage was prevented and often infection developed in uterus and tubes, and the last condition was much worse than the first.

Emmet never taught such gynecology as this. He did not even teach that all cases of laceration of the cervix should have an operation. On the contrary, he believed that many of them did not require any interference, simply because they were not producing any morbid symptoms. The tendency has been too much in the direction contrary to his teaching, with the result that gynecology has been brought into disrepute. Many of the symptoms that were attributed to laceration of the cervix have been found to be due, not to the laceration, but to disease of the other pelvic organs. In a majority of women during the child-bearing age dilatation, to give free drainage, is needed rather than trachelorrhaphy. In long-standing cases, in which ragged lacerations exist with atrophy of tissue, amputation of the cervix is much better surgery. The men who gave the most thought to this matter are the men who are still doing strictly gynecologic work. The sins of commission need atonement and the general surgeon, I fear, is far too prone to do routine trachelorrhaphy if a laceration exist. The well-trained gynecologist is still needed in this most important condition—a condition so common, and, when badly treated, fraught with so much danger. Aside from closing the canal so that stenosis follows, the scar tissue becomes a troublesome



factor in future pregnancies, predisposing to a more serious laceration at labor.

Closely related to this subject is the matter of dilatation and curettage. While valuable in properly selected cases, such as fungoid degeneration, hemorrhages and leucorrhea due to "passive congestion" of the endometrium, its frequent use for dysmenorrhea, etc., cannot be too strongly condemned. Few cases of dysmenorrhea are even relieved by this operation, while very many are made much worse. The cause lies either in some nervous lesion or in the uterine appendages. It is an operation that requires as much care and skill in its proper performance, and good judgment as to its necessity, as any gynecologic operation that is done, and yet any tyro in the profession, with no experience whatever, attempts it and believes it a simple matter. There are places where "angels fear to tread." The gynecologist is very much needed in this very simple operation.

The plastic operation of perineorrhaphy, so often done by the general practitioner, to say nothing of the general surgeon, is far too often apologetic, when compared with the work of Emmet, Thomas, Marcy and others throughout the country. Denuding the mucous membrane and uniting the cut edges without gathering up and uniting the torn and separated muscles and fascia do not constitute a perineorrhaphy, yet it is within the observation of many of us that such work passes as the proper thing. It is to be feared that the "faith once delivered to the fathers" has not been kept in this particular. That intrauterine medication is still practiced to a considerable extent is apparent to every gynecologist of large experience, who is seeing constantly its evil results in infected uteri and appendages. In this instance we have made a wide departure from the pioneers in gynecology, with much advantage to women in general, but, as error is rarely overtaken by truth, much remains to be done by the true gynecologist.

The field for bladder work is large and has been cultivated only to a limited extent. Emmet and Skene in particular labored faithfully and intelligently in certain directions, while Pawlick and Kelley enlarged the field of vision and laid the foundation for more accurate and more scientific treatment. Laborers still are needed in this department of gynecology.

Displacements and deformities of the uterus are yet matters of the utmost importance, while the question of treatment is far from being settled; at least, the profession

believe that the various "best methods" are at present on trial. No body of medical men is more competent to investigate this than the American Gynecological Society. We believe the proper solution of the problem will be found among the Fellows of this or similar organizations—certainly not among general surgeons. Alexander, Kelley, Dudley, Mann, Goffe and many others have contributed to the large list of operators who have done good work in this special direction.

From plastic work about the vagina and bladder, which was the primary step in gynecology, the advance to the pelvis and abdomen was rapid. Here we may claim properly that the progress and even the inception of all that was and is best came by and through the men that may be classed strictly as gynecologists.

It is not necessary in this paper and before the Fellows of this Society to review the work done by all men who have labored in this field. Suffice it to say that no one man is entitled to more credit than each of several others. Those most familiar with vaginal manipulations soon discovered that the uterine appendages above the vaginal vault were the cause of much suffering and subject to nearly every form of disease. At first the large cystoma seemed the only proper disease to attack by abdominal section, and Spencer, Wells, Atlee and Peaslee were among the early operators, giving the world confidence in the necessity for such operations and establishing the fact that they were feasible and safe to a great degree; at least, that the mortality by operation was much less than from the disease, which showed an average duration of life of not more than three years.

Bathey did conscientious work in removing ovaries, which he deemed the cause of much of the suffering of women, and accomplished an amount of good which long-continued treatment in other directions had failed to accomplish. If oöphorectomy were done too much, it was the consensus of opinion of gynecologists that checked its advance and adopted what is now deemed "conservative surgery of the uterine appendages." Polk and Dudley of this Society are among the most prominent in advocacy of this new departure. We are only in the beginning of the work, and certainly we must look for its completion to the gynecologist, not to the general surgeon. Many of these operations have been done through the vagina rather than by abdominal section. Between these two methods each man must choose for himself. The French gynecologists made the

vaginal route the popular one, but if, as is said, this was done in defence against general surgeons, who claimed that gynecologists were encroaching upon the domain of the general surgeon, some better reason must be found if the practice is to be continued. Not only is so-called conservative surgery of the appendages done per vaginam, but panhysterectomy and all the major operations upon the pelvic organs are performed in the same manner.

So long as the question of choice of methods remains *sub judice*, so long will the strict gynecologist be in evidence. Perhaps no man did more for the advancement of abdominal section and all that relates to its technic than the aggressive and belligerent Tait. He simplified the methods and taught practically by the force of his example and by his earnestness modern asepsis in place of the cumbersome, dangerous paraphernalia of germicidal solutions. While none of us would desire or be willing to detract one iota from the world-renowned Lister's fame, we must admit that the men who, like Tait, opposed the introduction of toxic material into open wounds, are to be numbered among the promoters of surgical progress. He demanded only cleanliness, which he maintained could be secured without the use of poisonous chemicals. He popularized and improved the forceps for the discovery of which Koeberle and Pean are justly entitled to the credit, and gave these hemostatic instruments a prominence in operative procedures hitherto unknown. His treatment of septic peritonitis by salines instead of by opiates was adopted by general surgeons. His method of preparing patients for operation, by purgation, baths and general stimulation of all the eliminative functions as a preliminary step in all surgical operations, has been adopted as well into other departments of surgical practice.

We owe much to such gynecologists as Tait, Keith and August Martin. They were chiefs among the scores of workers, both in this country and in Europe, that almost entirely invented and perfected the methods and technic of abdominal surgery from the diaphragm to the pelvic floor that have been adopted by general surgeons. That anastomosis of the intestines and gastric surgery have been perfected by general surgeons, we do not wish to deny, but the familiarity with abdominal section that had been acquired by gynecologists gave an incentive to these later operations that otherwise would not have obtained.

Lest the general surgeon may say that ab-

dominal surgery did not originate with gynecologists, and that therefore they are not entitled to the credit, our reply is that the few cases operated upon in the first half of the nineteenth century had so high a degree of mortality that the operation was practically abandoned, until it was taken up and made successful by the men that were not general surgeons but specialists. In this country, Atlee, Peaslee, Thomas, Kimball, Dunlap, and many others were prominent operators.

The best work for malignant disease of the pelvic organs has been done by gynecologists, and to them must we look for further progress. Probably no man can show better results in the way of relief and even cure of cancer of the uterus than Dr. John Byrne, a former President of this Society. Whether hysterectomy in any stage of the disease is to be the ideal method is by no means well settled. The past does not give very satisfactory results from this operation, even when the most radical dissection has been done. I believe that a more careful examination and more close observation of women by general physicians will detect malignant disease in its earlier stages, at a period when hysterectomy will be the ideal operation. To gynecologists, men most familiar with these organs, we must commit the detection and treatment of a disease so widespread and fatal. The large percentage of cures in cases of cancer of the lip, which is early apparent and generally removed early, should lead us to hope that in uterine cancer a similar result may be had whenever diagnosis can be made in the incipient stage of the disease. The gravity of the situation demands all that science and skill of the highest order can possibly give to eradicate this, the most dreaded affliction to which woman is subject.

Much yet remains to be done in plastic operations about the vagina, not only in relation to prolapsus uteri, but for vesicocoele and diseases of the urethra, especially caruncle. Incisions into the posterior cul-de-sac for acute inflammatory attacks, whether attended by pus or not, may well deserve the attention of the gynecologist. While this was one of the early gynecological operations for pelvic abscess without reference to ulterior results, it is now well known that thousands of women can be saved from long and painful illness and subsequent hysterectomy by timely, common sense application of the surgical principle of removing the products of inflammation as soon as formed.

These may seem trivial matters, which scarcely deserve presentation in a paper of this character, but they are of immense importance to the patient, for whose good we are earnestly laboring. In her behalf I make this appeal, fearing lest, attracted by the fame that follows the capital operations, participated in by both gynecologist and general surgeon, we may depart from the "faith once delivered to the saints," and learn to despise the day of small things.—*American Gynecology*.

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### Therapeutic Suggestions.

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For neuralgic or muscular pain, try equal parts of guaiacol and glycerine, applied locally.

Potassium permanganate, given gr. i in pill or tablet, followed by a half glass of water, is an excellent stimulant to the menstrual flow in certain forms of amenorrhea.

It is said that ten minims each of tincture of aconite and of chloroform, mixed and applied locally, will quickly relieve the pain of sciatica.

Hypodermic injections of pilocarpin have relieved severe cases of œdema of the glottis.

To loosen an adherent dressing pour on peroxide of hydrogen.

In your next case of pneumonia try carbonate of creosote in full doses.

Nothing will break up a cold after it has become fixed. Many so called "cold remedies" will break up the patient if not the disease, and in some plans, such as soaking the feet and imbibing a quart or two of catnip tea, the remedy seems to be worse than the disease.

If, however, you wish to break up a cold, *cito tuto, et jucunde*, put ten minims of tincture of gelsemium in two fluid ounces of water, add one hypodermic tablet of morphin and atropin, and of this mixture take a teaspoonful every fifteen minutes until six doses have been taken, and thereafter take a teaspoonful every hour.

In spasmodic urethral stricture give cirnificuga and gelsemium in full and frequent doses.

This is the day of prepared breakfast foods with catchy names, but it is well to remember that it has been determined by government experts that white bread made from flour made by the patent milling proc-

ess contains more nutritive material than any one of these much advertised health and force producers.

Sugar furnishes a large amount of readily available heat and energy producing elements, and is an important part of our dietary. Growing children have a great "hankering" for sweets, and to a certain degree it is well for them if this taste be gratified.

Undoubtedly a certain amount of pure candy eaten after dinner is a valuable addition to the child's diet. While this is true, yet the amount that can be safely eaten at one time is small, and many children make themselves sick from overindulgence in sweets.

Mothers should provide sweetmeats for dessert and should serve out a small amount to the children, but eating candy between meals should be forbidden.

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**SCHOOL HYGIENE.**—Out in Oakland, Cal., the Board of Health has taken a step which, whether it be wise or not, or necessary or not, is certainly worthy of thoughtful consideration in all parts of the country. What the Board of Health did was to advise the Board of Education to exclude from the public schools of the city any teacher or pupil now suffering from tubercular consumption, and in the future to prevent the admission of such sufferers by stringent regulations. One section of the resolution, which was unanimously adopted, reads: "Any employee in the service of, or pupil in attendance upon, any public school of said city, suspected of being affected with pulmonary tuberculosis, shall, within one week after having been notified by the City Superintendent of Schools, either withdraw from the service of the school department or attendance upon school, or submit to a bacteriological examination by the city bacteriologist, who shall, upon the completion of such examination, file with the City Superintendent of Schools a certificate setting forth the result of such examination." The examination is to be at the expense of the city, and the Board of Education is to base final action on their bacteriologist's report alone. It is probable, or rather sure, that this plan will excite strenuous opposition, but unquestionably there is much to be said in its favor, and it is apparently in line with the tendency of the times. The decision reached in the matter by the Oakland educators will be awaited with general interest.—*New York Times*, *The Philadelphia Medical Journal*.

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PORTLAND, MAINE, NOVEMBER, 1902.

## Insurance Laboratory.

Statisticians tell us that the sum of money representing the loss from fire in the United States during one year would be sufficient to pay all the running expenses of our national government. Many fires are due to carelessness, and much of this loss could be prevented if certain precautions were taken.

The fire departments of our American cities are run at large expense, and are conceded to be the equal of any in efficiency, and yet the loss from fire in the city of London is much less than that in the city of New York.

Of late certain modern improvements—the enormous number of overhead wires threading our streets, the general introduction of electric lighting, and the more common use of acetylen gas and gasoline—have added greatly to the fire risk in all our cities, and calls for a more careful and scientific study of the whole problem of fire insurance. Therefore, it is not surprising to hear that several of the large insurance companies have banded together and established a well equipped laboratory in which the study of all the questions affecting fire loss can be investigated in the most thorough manner. To accomplish this end every facility will be afforded to learn the effects

of defective wiring in causing fires, and the best means to be adopted to prevent fire loss from explosions and from defective construction of buildings. Investigations will also be undertaken to determine what are the best fireproof materials, and to devise means so that such materials shall be more generally employed in building. All this is of great importance to the insurance interest and indirectly to the whole people. Every year, besides the great money loss, there is an appalling loss of life from explosions and fires, and since, by reason of the great value of land in our cities, it has become necessary to erect buildings of twenty and thirty stories, the question of adequate fire protection has become a very serious matter. The apparatus now in use by our fire departments is entirely inadequate to fight a fire starting anywhere near the top of one of these skyscrapers. No engine could throw a stream of water to this height, and new apparatus must be invented and better methods devised. This work the trained and skillful experts of the insurance laboratory have now undertaken, and, because everybody is more or less interested in these problems and their early solution, the insurance companies should receive support and help in their commendable undertaking.

## Untrained "Experienced" Nurses.

While the profession of nursing has made great advancement since the days of Betsey Prigg and Sairey Gamp, and while it is now accepted that the trained nurse is an important ally of the physician in preventing and curing disease, yet the honors and the emoluments of the profession are such that it seems to offer a great temptation to many young ladies to enter the field by the methods of quackery rather than by the longer and more laborious route of study and of hospital training.

In every city there are every year an increasing number of misguided individuals—whose principal stock in trade is assurance, self-conceit and brass—who are posing as "experienced nurses," when they have had little or no training for the work. These so-called "experienced nurses" are girls who have served as probationers in training schools and not been accepted, or they have really worked a longer or shorter time in hospitals and have left or been discharged after a few months' service. None of them have been graduated from any training school, and none of them are competent to nurse the sick.

Such a condition of affairs is neither for the good of the nursing profession, of the medical profession, nor of the general public, and something should be done to stop the practice and to guard the public from the misrepresentations of these untrained "experienced" nurses.

Of course it is useless to appeal to the sense of honor of any person who adopts the methods of quackery to enter the profession of nursing, and therefore the evil must be combatted by some other means. To a large extent the trained nurse gets her employment through physicians. In a majority of cases of sickness the attending physician is the authority which decides when a trained nurse is needed and also who the nurse shall be. It is a duty which we owe to ourselves and to the public to see to it that uneducated, untrained and incompetent persons are not allowed to masquerade as graduated nurses, for it is the height of injustice to require the graduated nurse to bring a certain amount of preliminary education to her work, to possess certain natural qualifications, and to study and work three years in the training school of a hospital, if, after all this time and labor, she is not to be upheld and employed by the medical profession, and is obliged, by reason of the indifference of physicians, to compete with nursing quacks.

## Rheumatoid Arthritis.

The etiology of this disease has been a matter of much speculation and study, and several theories of causation have been from time to time adopted. The most convincing proof that none of these were satisfactory is found in the number of the theories. The causes that have been most generally accepted have declared that it was a disease of the nervous system, or that it was a peculiar form of gout or rheumatism.

When we have been called upon to apply a system of therapeutics founded on either of these theories of causation, we have found such plan of treatment unsatisfactory, and have been forced to acknowledge that whatever else rheumatoid arthritis may be that it is a chronic, distressing, intractable and incurable disease.

Recent investigations have tended to throw light upon the etiologic factors of this obscure affection, and we are now told that, whatever it may be, it is pretty certain that it should be classed as an infectious disease, or, at least, as one having a toxemic basis. It seems reasonable to suppose that both germs and their toxins are concerned in its causation, and it is hoped that this new light may enable us to increase the effectiveness of our treatment.

## Read and Ponder.

If every physician in Maine will read Dr. Gordon's article, entitled "The Relation of Obstetrics to Gynecology," they all surely will benefit from it. The author, a physician of great acumen, much ability and ripe experience, is well qualified to speak upon this important subject, having been a specialist in gynecology for many years and the recent president of the American Gynecological Society.

It is a melancholy conclusion that after all that has been taught in our medical schools, and all that has been urged by a few of our obstetricians, that much of the obstetric work now done is far from being of the aseptic or even the antiseptic type. It would seem to be an easy matter for any physician to approach the lying-in chamber with clean hands, and to carry out the few aseptic precautions that will ensure the safety of the mother and child, but nevertheless it is certain that many practicing physicians are too ignorant or too careless and indifferent to practice obstetrics *secundum artem*. The fundamental principle in obstetric practice is founded on the fact that the normal patu-

rient canal is aseptic, and therefore, if the woman is contaminated, either she herself, the nurse, or the attending doctor is to blame. Therefore the hands of all having anything to do with the delivery should be made as sterile as possible and kept so, and then as few examinations as possible should be made per vaginam. These are things easily done, yet oft neglected. The immediate results are sometimes disastrous, and the after-results are admirably shown forth in Dr. Gordon's paper. It seems to be certain that if the practice of obstetrics is made what it should be, and if the after-effects of gonorrhea are minimized, that the specialists of gynecology would not find so many patients claiming their aid.

The Portland Medical Club is twenty-five years old, and will celebrate its birthday next month. This club is the oldest and the most democratic of all the local medical societies, and has preserved its autonomy both before and since clubs became so fashionable.

The birthday will be celebrated by a reunion of the past and present members of the club, by appropriate literary exercises and by a banquet. The special exercises will include a poem, an oration, and a paper giving an historical sketch of the club.

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### Reviews.

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**THE MATTISON METHOD IN MORPHINISM.** A Modern and Humane Treatment of the Morphin Disease. By J. B. Mattison, M. D., Medical Director Brooklyn Home for Narcotic Inebriates. Published, 1902, by E. B. Treat & Co., New York. Price \$1.00.

The subject treated in this small volume is of the greatest importance. An adequate and practical method of treating morphin habits will be welcomed by the profession.

The plan advocated by Dr. Mattison is a modification of the so-called "Bromide Method." It depends upon the action of certain remedies, especially bromide of sodium, to produce "nervous sedation" and consequent control of reflex irritability.

Many physicians have reported excellent results in treating the opium habit by means of the bromide sleep, and this book gives full and explicit directions as to the best methods of applying the bromides to the relief of the suffering which follows when morphin is withdrawn from the patient who has acquired the morphin habit. The book is the result of thirty years' experience in the study and treatment of the morphin disease and should

be read by every physician interested in this subject. The book is well printed and well bound, but the price should be lower.

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**THE PUBLIC AND THE DOCTOR.** By a Regular Physician. Published, 1902, by Dr. B. E. Hudra, of Dallas, Texas.

This is both an instructive and an entertaining little book. Its especial object is to assist in enlightening laymen in regard to the nature of disease and the aim of treatment, to establish a better relation between the public and the physician, and to give much needed information to the masses. The author aims to explain the large and small intricacies of the profession, and to so influence thinking persons that greater good fellowship and confidence may be established between the physician and his patients.

One of the most important parts of the book is that which proves that the regular physician is the only one who works on scientific principles and whose work has resulted in enlarging our stock of medical knowledge. The reasons are also clearly given why the regular physician must insist on opposing quackery in the interest of his patients and the general public, and also why he must combat the assumptions and vagaries of the pseudo-sciences, osteopathy and christian science. Other subjects discussed are the qualifications of the real physician, the advertising doctor, the "Specialist," the "Wonder Doctor," Patent Medicines, Preventive Medicine, etc.

Besides all this, the book contains a great deal of excellent advice for the lay public, advice which, if followed, would result in great good.

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**THE PHYSICIAN'S VISITING LIST** (Lindsay & Blakiston's) for 1903. Fifty-second year of its publication. Published, November, 1902, by the P. Blakiston's Son & Co., Philadelphia, Pa. Price \$1.00.

A great deal of effort has been devoted to improving and perfecting visiting lists for physicians. The Lindsay-Blakiston list has been published for fifty-two years, proving positively that it is used by physicians and that it meets their needs. Every year improvements have been made to this doctors' *vade mecum*, and this year they include several pages devoted to Incompatibility—chemic, pharmaceutic and therapeutic—and a guide to the treatment of acute poisoning. These additions enhance the value of this physician's visiting list, both as a record book and a therapeutic guide.

## Correspondence.

BOSTON, MASS., Oct. 22, 1902.

*Editor of the Journal of Medicine and Science, Portland, Me.*

*Dear Sir:*—E. H. Judkins, LL. B., D. D., pays his ardent respects to me in the September issue of your JOURNAL and challenges me to answer certain questions. He quotes my statement, "Christian Science does not aim to practice medicine." This was made in answer to the assertion that Christian Scientists assume to be medical practitioners and are therefore liable to the regulations intended for that system. Laws regulating the practice of medicine insist that physicians shall be qualified in their special departments. A surgeon must understand that the amputation of a foot is more practical than the amputation of the head, and that the administration of strychnia is more dangerous than bread pellets. But the Christian Scientist administers no medicine, attempts no surgical operations, nor physical manipulations of any character; hence he does not need the restrictions which apply to these schools any more than the ordinary layman. Though the prayers of a Christian Scientist may be more effectual than those of his good neighbors who do not understand Christian Science, they are not therefore dangerous and not in need of legal restriction.

Dr. Judkins declares: "He has, in reply to another article of mine, said that the 'basic lesson of this science is scriptural,' but failed to produce the proof." Will the gentleman accept my apology therefor and give ear to my proof herein. Jesus declared, "God is Spirit." This is the basic lesson of Christian Science, and every statement contained in the Christian Science text-book is a consistent deduction therefrom. He also challenges me to show that Christian Scientists heal contagious diseases or prevent contagion. I have no authority to publish any names in connection with this matter, but will cheerfully give the gentleman privately the names of Christian Scientists who have healed contagious diseases if he desires to investigate. I desire to add here that, with all the noise that has been made in respect to the spreading of disease on the part of Christian Scientists, it has never been shown that they are responsible for the spreading of disease to such an extent as their neighbors who are not Scientists. Indeed, I do not know a single authenticated case where they have been responsible for the spreading of disease.

The criminal failures to which the doctor refers have been, in a large measure, simply

sensational newspaper errors. While a few persons have died from contagious diseases under Christian Science treatment, many others have been healed. A short time ago, a young lady was sent to a hospital with small pox; was pronounced very bad and hopeless. In some way she informed a Christian Scientist in regard to her condition, and, to the great surprise of the hospital physician in charge, rapidly recovered and is well today. On the other hand, millions have died under the practice of medicine.

Our critic declares: "One of the leading medical journals of Philadelphia has brought to the notice of the profession many such cases of criminal neglect. . . . In that city two mal-practitioners, probably of this cult, were recently held by the coroner for causing the death of an infant." I am well informed in respect to the case to which our critic refers, having made a thorough investigation of it, and I desire to say in unmistakable terms that Christian Science had nothing whatever to do with it. There is a vast difference between depending upon this Science and depending upon blind faith. Merely excluding medicine and having nothing in its place is not the practice of Christian Scientists.

Our critic declares: "Two female 'Christian' Scientists, in Milwaukee, Wis., were indicted for practicing medicine without a license." He adds, "They were convicted and fined." I am led to ask, if Dr. Judkins knew all about this case, why did he not say that the supreme court reversed the decision of the narrow-minded police judge, and the Christian Scientists were dismissed?

He declares: "In Victoria, B. C., a child died from laryngeal diphtheria lately; and the jury stated that the 'Christian Scientists' who maltreated the little boy 'did unlawfully kill and slay the said child.'" I have a letter from Mr. S. Greenwood, a reliable citizen of Victoria, B. C., in answer to my inquiry, in which he declares, "I would say that there is no truth whatever in the report you speak of. No child has died under Christian Science treatment in this city. The case referred to was that of the Zionites or the followers of Dr. Dowie. They have been in the courts twice on this charge." Thus we note that of the three examples held up in such a flaming manner by our critic, two had nothing whatever to do with Christian Science, while the other case he misstates. It is not strange that those who are used to depending upon medicine, and have only a superficial knowledge of the great benefits which have been accomplished through Chris-



tian Science, should consider a dependence upon this faith and the exclusion of medicine unsafe, but the Christian Scientist has proved convincingly to himself that a firm reliance upon God is the safest sort of a remedy for the ills of the flesh. There are multitudes today who testify to having been healed through Christian Science, after having exhausted all hope in other remedies. In view of such a record, there is little ground upon which to assume that all those who believe in the use of medicine should be the sole guardians of the health of mortals. There is little ground upon which to plead for legislation forcing Christian Scientists to resort to those methods under which millions of their brethren have died.

Our critic asks, "If Christian Scientists' do not aim to practice medicine, why do they try to treat diseases that doctors of medicine only are competent to treat under the laws of the state in which they live?" This question is not a competent one, since it assumes a proposition which has not yet been established. It has not yet been shown that the laws of any state exclude the practice of Christian Science, though this attempt has been made in several states. Since Christian Scientist practitioners have healed all manner of disease successfully, notwithstanding they have lost some cases, while on the other hand, notwithstanding whatever of success may have crowned the efforts of medical practitioners, they, too, have lost cases, not to say many cases, upon what ground can it be assumed that the medical practice is a sufficient success to waive all dissatisfaction therewith, while Christian Science is set aside as worthless?

Our critic asks, "Why do Christian Scientists appear before committees in various states in opposition to bills regulating the practice of medicine, if they are not aiming to practice it?" I would respectfully call the gentleman's attention to the fact that Christian Scientists have appeared before committees for the purpose of urging that the laws relating to the practice of medicine shall be confined to the subject in hand and shall not be manipulated in such a manner as to apply to those who heal by spiritual means and without medicine. Christian Scientists have no objection to the M. D's. regulating themselves and their practice. It is the attempt to prevent Christian Scientists from praying for their sick to which they object.

As to the dealing with contagious disease on the part of Christian Scientists, I desire to say no class of practitioners are more ex-

tremely careful in respect to quarantine than Christian Scientists. They recognize the general law of contagion, and that even Christian Scientists who are not properly and sufficiently protected by their understanding of the divine power and presence are liable to contagion. Like other classes, they have troubles enough which come uninvited, and do not intentionally or wilfully venture into the presence of contagious disease. Furthermore, they are extremely careful not to allow their sick to mingle with others, for they seek to avoid intruding danger upon their neighbors, and do not care to incur the unnecessary and additional labor that might be incurred when their patients with contagious disease are allowed to mingle with others. It is in strict accord with the teaching of this Science, not contrary thereto, that they use care in this respect.

Our critic asserts that a Christian Scientist stated, "We do not believe in infectious diseases, and a person, if a Christian Scientist, could not contract such diseases." If a Christian Scientist made such an assertion, he was certainly unwise, to say the least. Christian Scientists do believe in infectious diseases, though they may differ from others in their interpretation of their nature, and why? Because they have not yet attained to a sufficient realization of what Christian Science teaches to enable them to altogether unbelieve in disease. A Christian Scientist or a Christian, who is one in the full sense of that term, would be a perfect man, and would be able to say with the Psalmist, "Because thou hast made the Lord which is my refuge, even the Most High thy habitation, there shall no evil befall thee, neither shall any plague come nigh thy dwelling."

Christian Scientists are not boasting as to their ability to remain immune from disease. They only claim that they are safe in proportion to their reliance upon God. I doubt if any Christian Scientist was foolish enough to make the statement that he could "bring patients with the small pox into a room with other persons, or send children to school with scarlet fever." This may be possible, but a Christian Scientist would consider it a very foolish thing to attempt. It would be entirely contrary to the teachings of Christian Science to do this, for it is a part of the practice of this Science to avoid trouble as well as to overcome that which has already found lodgment in us. If it was not right for the Master of Christianity to cast Himself down to convince the devil, it certainly would not be right for Christian Scientists to

do this for the purpose of convincing those who partake sufficiently of the devil's nature to offer the same temptations which he suggested.

I am inclined to believe that successive generations of Christian Scientists will greatly improve the health and morals of mankind and their immunity from disease, and it is possible that a few hundred years from this present time there will be Christian Scientists far enough advanced to parade their patients with the small pox in the presence of their neighbors without any trouble. But a Christian Scientist far enough advanced to justify such an attempt could probably heal small pox instantly and would have nothing to parade. At this period, it is enough for a Christian Scientist to undertake the healing of a patient, without incurring the necessity of preventing his neighbors, who have been exposed to the disease, from taking it.

Our critic declares, "How many hundreds of innocent persons might thus be fatally stricken if 'Christian Scientists' could carry out their theories." The gentleman may rest assured that Christian Scientists are carrying out their theories. The only reason why the fatality to which he refers is not forthcoming is because the theories of Christian Scientists are not what he believes them to be. When he is better acquainted with Christian Scientists, their methods and their practices, he will certainly have a better opinion of them and will conclude that, after all, they are people of good sense and not dangerous to the community.

Our critic declares that Christian Science is not Christian. Let him show wherein Christian Science differs from the scriptural statement, "God is Spirit," and from the teaching of the Master, "It is the Spirit that quickeneth, the flesh profiteth nothing."

Christian Science is a system of religion based upon the above quoted teachings of the Master, and we challenge our M. D. friend to find a single statement in the Christian Scientist text-book that is not a consistent deduction therefrom. Furthermore, Jesus said, "He that believeth, the works that I do shall he do also." The ability on the part of Christians to do the works which Jesus did demonstrates the degree of their Christianity according to the standard of Jesus. We repeat again, Christian Science is demonstrable. It is not a belief, nor an ism. It is not claimed that this Science is in harmony with the more material philosophies, but it is scientific from a scriptural standpoint and proves its truth by its results, the healing of the sick accord-

ing to the method which Jesus taught and practiced. Moreover, many modern physicians approximate very nearly to the teaching of Christian Science; "All causation is mental."

ALFRED FARLOW.

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## Selections.

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### \*Acetozone (Benzyl-Acetyl Hyperoxide) in the Treatment of Typhoid Fever.

By DR. EUGENE WARDIN, Buffalo, N. Y., Surgeon U. S. Marine Hospital Service, Buffalo, N. Y.

Since the establishment of the cause of typhoid fever in the bacillus of Eberth, and the recognition that the symptoms are due to the absorption of the toxic products of that organism, the treatment of the disease has gradually passed from the domain of empiricism to a more fixed and scientific method. This method has for its primary object the elimination of the toxins from the system, although there are other features which all followers of Brand recognize as of peculiar value. The want of knowledge as to the seat of the primary colony of the germ, and the indefinite results attending all efforts to influence this colony in the intestinal canal with efficient germicides, without injury to the patient, has tended to popularize the Brand treatment, or its modifications, until today there is no well defined effort encouraged to either destroy or attenuate the primary colony, nor the secondary expressions of the infection. Indeed, an eminent authority has but recently declared that antiseptics (germicides) are not called for in the treatment of the intestinal complications in this disease. Except for the very general acceptance of the Brand treatment, therefore, almost every practitioner follows some plan of treatment devised by himself, the most of these plans being purely expectant. Why has this been so? Is it not because we have had but an imperfect idea of what we desired to accomplish? Because we have been content to meet symptoms, to be directed by events rather than to direct them? What can be done in this direction?

I will briefly state that the normal cycle of an uncomplicated case of typhoid infection is fourteen days, a fact indicated by the numerous instances of cases of this

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\*Note.—Since this article was written by Dr. Wardin the name of the antiseptic benzoyl-acetyl-peroxide has been changed from "benzozone" to "acetozone."—Publisher.

duration recorded during epidemics, and the results of treatment directed to this end in my own practice, and by the results thus far attending the effort toward the immunization of those exposed to widespread epidemic influences. In *American Medicine*, of the issue of February 8, 1902, I have presented for consideration the reasons upon which I based the conclusion that the primary germ colony in this disease cannot be considered as taking place in the intestinal canal, but that the weight of evidence shows it to be normally an invasion of the respiratory tract; that the bacillus of Eberth invades the general circulation from this primary colony (typhoid sepsis) in practically all diagnosed cases; that from the blood-current it may give rise to all of the well known terminal expressions, such as the infection of the intestinal canal, the gall-bladder, the urinary bladder, the serous membranes, bone marrow, etc.

From the results of treatment in the twenty-seven cases detailed in the above mentioned article, the duration of the disease was reduced in a large number of them to the fourteen-day cycle, the time being reckoned from the day of definite symptoms. In all of these cases the usual complications of the bowel were conspicuous by their absence, and if present in those admitted rather late in the disease they were quickly overcome. There were no deaths, and but few terminal expressions of the infection. The treatment pursued in them all was as follows: Upon admission to hospital the bowel was thoroughly moved by grain doses of calomel, combined with one grain of aloin and two of guaiacol carbonate, every four hours, until the canal was well flushed; also the patient was given from 1500 to 2000 cubic centimeters of the twenty-four-hour-old solution of acetozone (benzozone) daily; the diet was milk diluted with the acetozone solution. In addition to the acetozone thus administered by mouth, the effort was made to reach the colonial area in the lung by means of forced inspiration of the atomized solution, but owing to the paresis of these areas and the well known difficulty of atomizing the deeper structures, it is not known that the applications were of great benefit. In some cases the acetozone was given in capsule, five grains in sugar of milk thrice daily. To meet high temperatures cold sponge baths were used, and at times the full tub.

The first influence of the hyperoxide is noted in the much increased secretion of the

kidneys, due in part, no doubt, to the large amount of water ingested, although the same result is noted from the administration by capsule. The second influence is the very pronounced decrease of the odor of the typhoid stools, which soon become odorless, and at the same time the flora of the intestine quickly becomes diminished, plate cultures of given quantities of the dejecta showing comparatively few germs to the normal. In one case the dejecta were found to be *absolutely sterile* during the second week of the fever. The intestinal complications are most frequently the source of the gravest danger in typhoid fever, and are the cause of the major part of the mortality of the disease, and of many of the prolonged cases; therefore, if we have in this chemical an agent capable of at least partially sterilizing the intestinal canal, thus reducing the possibility of gaseous fermentation with bowel distention and its concomitants, hemorrhage and perforation, a great advance in treatment has been gained. But we accomplish at the same time the destruction of the secondary infection of the canal by the typhoid organism, thereby averting further toxemia by absorption from the canal. Mixed infection is made materially less probable. The germicide is therefore to be directed against both the primary colony in the respiratory tract and the secondary expression in the alimentary canal, and I have used the solution by hypodermoclysis with benefit.

In the management of typhoid fever we must remember, however, that the natural cure of the disease results from that normal reaction of the body to the toxic stimulus of the products of the germ colony, which produces in the blood those anti-bodies which exercise an influence upon the organisms, either lytic or inhibitive, resulting in the cessation of all symptoms. If this reaction occurs normally the cycle of the disease is established, and, as I have said, is practically fourteen days. If, however, the organism colonizes, from hemorrhage, in the canal, wherein it is to be assumed the anti-bodies do not so readily influence them, and absorption of toxins takes place, the fever is thereby prolonged. It is noteworthy that so many cases of the disease last twenty-one days, a fact explainable on the hypothesis that the primary intoxication of fourteen days is overlapped by the secondary toxic influence from the bowel, which must commence about the end of the first week, thus making the fastigium of the fever the time of the greatest intoxication in these complicated cases, which

the best authorities place at or about the fourteenth day, the fever ending by lysis near the twenty-first. In some cases the reaction to the toxic stimuli takes place so poorly and slowly that, in spite of the practical sterilization of the canal and the prevention of its complications, the disease progresses beyond its normal cycle into a prolonged atypical course, characterized by a most irregular temperature chart, and frequent losses of the attained immunity—relapses, most trying both to patient and attendant, and ending in death or slow convalescence. In these cases our efforts must be toward the supply of preformed anti-bodies, to the end that normal cure may be established, and my ideal treatment of the disease combines all of the measures herein mentioned, one of my cycle cases recently illustrating perfectly the reasonableness of the expectation to reduce the disease to the fourteen-day period of duration.

As to the innocuousness of the peroxide (acetozone), I can only say that I have never observed any deleterious symptom from its use as a germicide in all conditions, medical or surgical, requiring its exhibition. The necessity of care in the preparation of its solutions in order to insure its germicidal effect is dwelt upon in the literature supplied by the firm of Parke, Davis & Co., who have supplied me the chemical. The testimony of the chief nurses in the fever divisions of our hospital will appeal to us in support of the usefulness of the peroxide. They affirm that the labor of the care of like numbers of cases of typhoid fever has been diminished one-half since the introduction of acetozone.

We may therefore conclude: (1) That the peroxide is efficiently germicidal under conditions favoring its hydrolyzation; (2) that it is innocuous to man and animals, being readily excreted through the kidneys as hippuric acid; (3) that in the treatment of typhoid fever and other bacillary diseases it is directly applicable to destroy the primary colony, provided it can be brought into contact with it; (4) that its special application in typhoid fever enables us to obviate intestinal infection and absorptive toxemia therefrom, thus favoring the formation of protective anti-bodies, and limiting, in many cases, the disease to its normal cycle; (5) that in those cases of inefficient reaction in typhoid fever its use tends to make the patient much less uncomfortable, thereby offering better results from appropriate serum therapy—*The Therapeutic Gazette*.

**\*A Report on Experiments Made With Cargile Membrane for the Purpose of Determining Its Value in Preventing the Formation of Peritoneal Adhesions.**

Condensed from a paper read at the meeting of the Surgical Section of the New York Academy of Medicine, April 14, 1902, by ROBERT T. MORRIS, M. D., New York, Professor of Surgery at the New York Post Graduate Medical School.

On March 8, 1900, I received from Dr. Charles H. Cargile, of Bentonville, Arkansas, a package of what he called "sterilized animal membrane," and with it a letter requesting me to give the material a trial in the field in which Senn's omental grafting would be of service.

Dr. Cargile wrote that his experimental tests had not been conducted among sufficiently favorable surroundings to bring out the practical value of the idea. The form of animal membrane that he had chosen was a particularly thin gold beaters' skin, made from the peritoneum of the ox. It had been subjected to heat-cumol sterilization by Mr. Kilmer, of the firm of Johnson & Johnson, and was prepared in the form of a folded sheet, in a sealed paper package. Shortly after receiving the material I applied it in a case of pyosalpinx, for the purpose of keeping separated peritoneal adhesion surfaces apart. The patient was of the sort that disappears from view after leaving the hospital, and the matter dropped out of mind until December, 1901, when I had a particularly troublesome case of extensive recurrent adhesions, following a peritonitis from appendicitis.

An operation for the purpose of separating adhesions had been done previously, and at that operation the whole of the adherent and disorganized omentum had been removed. The long stump of omentum again became adherent in spite of the application of the aristol film method of treatment, and the patient was becoming a morphine habitué, though a woman of strong will, and definitely opposed to the use of drugs for the purpose of relieving her discomfort. After separating the adherent stump of omentum, strips of the Cargile membrane were applied over all surfaces that had lost their covering of endothelium. It was observed that the membrane became intimately adhered at once, and that it appeared much like a normal peritoneal covering. The abdominal incision healed by primary union, and the subsequent relief from adhesion complications was so well defined that I planned a series

of experiments in order to settle several questions that naturally came to mind. It was important to know how long the Cargile membrane resisted absorption, what became of it eventually, and to know if the membrane itself added any element of danger in the application.

In order to make the experiments cover a wider range, I asked to have some chromicized membrane and also some sheets of thicker vellum prepared. It was assumed that a material for preventing the formation of peritoneal adhesions should be unirritating, that it should be sufficiently durable to resist absorption until enough time had elapsed to allow new endothelial cells to cover denuded surfaces, and yet not so durable as to stimulate the peritoneal to encapsulate the mass. Further, it should not furnish an introduced culture medium for saprophytes.

The experiments were made upon rabbits, at the Physiological Laboratory of the College of Physicians and Surgeons, where the facilities for research work planned by Dr. John G. Curtis furnished opportunity for proper detail work.

The assistants were my associate, Dr. L. A. di Zerega, and Mr. John T. Hoyt. The same general course of procedure was adopted with all of the rabbits. An animal having been anaesthetized, the fur was removed cleanly from the abdomen by means of an antiseptic depilatory. Normal saline solution was employed for cleansing purposes in the course of operative work.

Hands and instruments received the customary aseptic preparation.

The abdominal incision was closed with catgut or with silk as specified in the notes and the wound line sealed with collodion. Typical specimens removed at various times later were given to Dr. A. J. Lartigau, who prepared them for examination to determine the ultimate fate of the Cargile membrane in the tissues. A separate report will be made upon this part of the investigation.

Ten of the twelve rabbits were apparently little disturbed by the operative work. One rabbit died while under the influence of the anaesthetic. One rabbit suffered from the effects of bichloride of mercury poisoning, as stated in a subsequent note.

The following experiments and observations were made:

January 15, 1902.—Rabbit No. 1. Adult, white, male. Colon scarified with a needle over an area about one and a half inches square. Cargile membrane applied over the scarified area and sutured in place with a

suture of fine silk at each angle. Abdominal wound closed with No. 1 silk. Rabbit No. 1 killed three days later. Observation—Primary union of the abdominal wound. Membrane and surroundings lightly adhered to all near-by peritoneal surface faces with loose transparent coagula of lymph. Membrane area of colon apparently contracted to perhaps four-fifths of its normal dimensions. The membrane seemed to be incorporated in the bowel wall, excepting at one point, where a bleb about as large as a pea, containing lymph, was elevated above the common level. Question—Are the abundant lymph coagula finally absorbed or will they remain to cause permanent adhesions?

January 15.—Rabbit No. 2. Adult, gray male. Question—Will Cargile membrane seal in an infected area, or will it become itself infected and add an element of danger? Experiment—Incision about one-quarter inch long made through colon wall. Fecal matter allowed to escape. Opening closed with a Lembert suture. Fecal matter wiped away, but no special cleansing done. An area of colon round about the incision scarified for an area of about one and a half square inches. Cargile membrane applied and held in place with four silk sutures. Abdominal incision closed with silk. Rabbit No. 2 killed one week later. Observation—Primary union of the abdominal incision. Membrane area contracted to apparently three-fifths of its normal dimensions. No peritonitis. No adhesions round about the site of the membrane, excepting one unimportant thread. Membrane intimately incorporated in bowel wall excepting at a point directly over the colon incision, where a small bulla, raised above the surface, contained a clear lymph coagulum. Conclusion—Membrane can wall in an infected area without itself becoming an added culture medium.

January 15.—Rabbit No. 3. Adult, white male. Question—Can the membrane seal in a necrotic area of bowel? Experiment—An area of colon wall about one and a half inches square was rubbed with a tablet of bichloride of mercury. Membrane was applied evenly over the injured area excepting at a small space left purposely exposed for comparison. Silk closure of abdominal wound. Rabbit No. 3 killed three days later. (It was intended to keep him for a week, but the animal was evidently suffering from bichloride of mercury poisoning, and was very ill. An incidental note may be of interest in the fact that this ill rabbit seemed to be almost chloroform proof, and several

minutes' exposure to chloroform vapor with practically no admixed air was required.) Observation—Intense general peritonitis. Large, firm, opaque lymph coagula about the margins of the membrane held it in place, and there were loose adhesions at various points in the peritoneal cavity, together with much free serum. The membrane was not adherent to or incorporated in any part of the colon wall. Superficial necrosis of all of the bowel wall that had been exposed to the action of bichloride of mercury. Conclusion—An inflammatory process may be sufficiently marked to prevent the adherence of the membrane, and in that case the membrane would remain as a loose foreign body in the peritoneal cavity for some time.

January 15.—Rabbit No. 4. Adult, gray and white male. Question—What becomes of the membrane allowed to remain loosely in the peritoneal cavity, without the lymph adherence furnished through scarification of peritoneum? Experiment—A strip of membrane  $3 \times 1\frac{1}{2}$  inches fastened to colon by two silk sutures at one end, allowing the remainder of the strip to hang free. No scarification of peritoneum. Abdominal incision closed with silk. Rabbit No. 4 killed five days later. Observation—Primary union of abdominal incision. Membrane lightly adherent to various loops of bowel by a few loose, transparent lymph coagula. No evidence of other disturbance of peritoneum. Conclusion—Membrane undergoes practically no change during five days of exposure, and its presence is not a source of much irritation to the peritoneum. In so small an animal as a rabbit, a foreign body of the size of this strip of membrane used in the test would naturally appear to be rather formidable, and the absence of more extensive evidence of irritation caused by its presence seems to be significant.

January 22.—Rabbit No. 5. Large white pregnant female. Question—Will the membrane prevent the formation of the common and troublesome adhesions which form along the line of suture after some of our simplest abdominal operations? Experiment—Incision in middle abdominal line three inches long. To the right of the line of incision the peritoneum of the abdominal wall was scarified for a width of half an inch and a length of three inches. A strip of membrane three inches long and two inches wide was laid upon the subjacent loops of bowel and the abdominal incision closed with large silk sutures (No. 3), which were allowed to extend so far over the peritoneal surface that local adhesions would have been assured

under ordinary circumstances. In addition to using coarse silk, the silk was allowed to trail over the fur of the rabbit in order to introduce a moderate degree of sepsis. Rabbit No. 5 killed forty-five days later. Observation—Abdominal incision firmly closed, but carrying several foci of infection with nodules of encapsulated cheesy pus. No adhesions anywhere within the peritoneal cavity. The silk sutures plainly visible beneath what appeared to be new and normal peritoneal covering. Where nodules of suppurating foci had projected within the abdominal cavity their surfaces were covered benignly with normal appearing peritoneum. No sign of the membrane remaining, excepting opaque blotches upon the bowel wall, at which points the membrane had evidently adhered during the progress of its absorption. Conclusion—The membrane can serve to prevent adhesions between bowel and abdominal wall, under a most severe test.

January 22.—Rabbit No. 6. Small brown female. Question—If loose adhesions form, as in experiment with rabbit No. 1, are these adhesions soon absorbed? Experiment—Scarification of an area of colon wall about one inch square. Segment of membrane two inches long by one and a half inches broad applied without sutures. Abdominal incision closed with small catgut. Rabbit No. 6 killed forty-five days later. Observation—No adhesions and no trace of membrane remaining. A single short string of lymph dangled from the abdominal wall. Conclusion—The membrane can protect against such adhesions as would certainly form after scarification of the bowel wall under ordinary conditions and no evidence of the presence of the membrane was left at the end of forty-five days in this case.

January 22.—Rabbit No. 7 took the anæsthetic badly and suddenly expired under its influence.

January 22.—Rabbit No. 8. Medium sized white male. Experiment—Repetition of experiment with rabbit No. 6, but observation made at the end of ten days instead of forty-five days. Observation—Primary union of abdominal incision. Loose transparent adhesions about the site of the membrane, including parietal peritoneum and that of bowel near by. Membrane intimately adherent to the scarified area of bowel wall, and succulent looking, but apparently not as yet becoming absorbed. Conclusion—The membrane resists absorption for considerably more than ten days.

February 1.—Rabbit No. 9. Large brown male. Question—How does chronicized



membrane behave in the peritoneal cavity? Experiment—Scarification of area of colon wall one inch by one and a half inches. Chromicized membrane applied to scarified area without sutures. Abdominal incision closed with catgut. Rabbit No. 9 killed thirty-six days later. Observation—Primary union of abdominal incision. One trifling string of adhesion near membrane site. Membrane area barely distinguishable, the material apparently smoothly incorporated in bowel wall or absorbed completely. (Pathologist's report will describe this specimen.) Conclusion—Chromicized membrane probably possesses no advantages as compared with simply prepared membrane.

February 5.—Rabbit No. 10. Large brown male. Repetition of experiment with rabbit No. 9. Rabbit No. 10 killed thirty-six days later. Observation—Primary union of abdominal incision. No peritoneal adhesions anywhere. Membrane is elevated above the surrounding peritoneal level, but the membrane apparently benignly incorporated in bowel wall. Conclusion same as with rabbit No. 9.

Rabbit No. 11. Adult white male. Repetition of experiment with rabbit No. 1, with longer time observation. Rabbit No. 11 killed thirty-one days later. Observation—One unimportant adhesion thread remaining near the scarified area, but the membrane evidently absorbed, excepting for a loose tag hanging from the bowel. This latter was succulent looking and was probably a part of the membrane that had not become engaged in the scarification lymph, and was probably undergoing absorption more slowly on that account.

February 5.—Rabbit No. 12. Large brown male. Experiment—First, a repetition of experiment with rabbit No. 11. In addition, an intussusception of ileum was made by touching the bowel with carbonate of sodium, and, when the intussusception had formed, the area was surrounded with a strip of membrane. Rabbit No. 12 killed thirty-one days later. Observation—Primary union of the abdominal incision. No peritoneal adhesions. Scarified area of ileum much thickened, and the peritoneum grayish in appearance at that point, but the intussusception had not progressed, and the Cargile membrane had left no sign of its presence unless in the gray coloring of peritoneum.

Remarks.—The fact that suppurative occurred in the one case only in which it was intended that it should occur is evidence of the care given to aseptic details by my assistant. Cargile membrane seems to resist

absorption in the peritoneal cavity for more than ten days, and less than thirty days. Its presence apparently causes the formation of temporary loose adhesions, which are harmless and which become absorbed for the most part in less than thirty days. The membrane seems to cause very little disturbance to the peritoneum, it does not furnish a good culture medium for bacteria, and it protects areas of peritoneal surface that have suffered injury to their endothelial covering, until new endothelial cells have repaired the injury without involving neighboring peritoneum. It is not necessary to suture the membrane in place, as it becomes instantly adherent to moist surfaces, and is not readily dislodged afterward. In this connection it may be well to give warning against handling the material with wet hands or instruments.

In addition to the experiments in the peritoneal cavity I have applied the membrane for a variety of purposes in wound treatment. As an animal membrane it seems to be particularly agreeable to the tissues of open wounds. It serves as an excellent conductor of epithelium when placed next the wound beneath absorbent dressings. It is not impervious to moisture, and in that regard possesses advantages over gutta serena tissue or silver foil. In brain surgery the membrane adheres closely to exposed brain tissue, and it makes a very good dura mater for temporary purposes. It can be used to keep severed and sutured tendons from uniting en masse. I have had no opportunity to employ the Cargile membrane in plastic eye surgery, as few of these cases get to my clinics, but from our knowledge of the value of this material as a conductor of epithelium and of endothelium it would seem to offer advantages in this special field.—*Red Cross Notes.*

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#### How to Assist Young Girls to Womanhood.

By EDWARD C. HILL, M. D., Denver, Colorado.

The primary establishment and the menopausal cessation of menstruation are the two crucial physical epochs of woman's life. The change from maidenhood to womanhood is one that involves the whole body, and manifests itself alike in the form, the voice and the sexual and nervous phenomena. In an ideal state of perfect health this transition into puberty should be as natural and uneventful as gliding from sleep into consciousness. Owing, however, to the present civilized modes of living, the cerebral develop-



ment of young girls is fostered and forced to a degree that deprives the remaining tissues and organs of their necessary nutrition, and too often we are called upon to treat delicate girls that are like buds blasted in the blossoming. Many a woman traces back a prolonged existence of semi-invalidism to exposure and lack of care at the early menstrual periods. Tight lacing also predisposes to pelvic disorders by interfering with circulation and exciting uterine displacements. The strain of puberty upon the nervous and blood-forming structures may be too great in a subject hereditarily deficient in vital resistance and adaptability. So we may count among the morbid incidents more or less peculiar to puberty, chlorosis and anemias, general debility, neurasthenia and hysteria, acute pneumonic phthisis, chorea and hebephrenia.

According to Emmet, more than half of all women who have suffered at puberty from menstrual derangements are sterile and delicate in after life. Skene has stated that his observations showed that the vast majority of incurable diseases peculiar to women originate in imperfect development and consequent derangement of function. This development is either primary, during the embryonic stage, or secondary, at puberty. Defects in the former are irremediable, whereas secondary deviations from the normal standard are both preventable and curable in most instances.

It is important in connection with the subject under consideration to bear in mind the essential reciprocal relations of the reproductive system and the general organization. As Virchow says, all the specific properties of woman's body and all her womanly characteristics depend upon her ovaries. In other words, a woman is not fully a woman unless her sexual development is natural and complete and in line with a healthy general organization. A beautiful illustration of sexual dimorphism has been furnished by Prof. Max Weber (quoted by Skene), who represented the case of a chaffinch in which the left side of the body had the female coloration and the right side that of the male bird, the two colors being sharply limited at the middle line. The bird was a hermaphrodite, with a well-developed ovary on the side of the female plumage and a testicle on the opposite side. The phenomena of menstruation offer the most palpable evidence of the onset of puberty. The precise nature of this rhythmic cycle is overshadowed by a jungle of theories, and, as Millikin well says, we can do no better in the present state of our knowledge than accept menstruation as a habit

which has been nailed upon our race by heredity, and which is for us an ultimate biologic fact.

Normal menstruation in temperate climates generally begins in the fifteenth year. In the tropics it appears much earlier, so that in Mexico one may see a grandmother of only twenty years. Within the Arctic Circle Eskimo girls do not generally arrive at puberty until the eighteenth year. City girls usually have the menstrual flow earlier than do hard-working country girls, in whom muscular exercise has the same derivative effect on the pelvic blood supply as too intense devotion to study. The time, amount and character of the menstrual flow vary normally within wide limits. The menstrual cycle for different individuals ranges in perfect health from two to six weeks. The average duration in the temperate zone is about four days. Soaking more than three napkins daily is considered abnormal. Anemic girls, as a rule, tend to menorrhagia; chlorotic ones, to scanty menstruation. Clots are present when the amount of blood is great, or the mucus and fatty acids scanty. A periodic white menstruation, from supersecretion of the uterine glands, is not infrequently noticed in the intervals midway of menstruation.

Menstruation is or should be a perfectly physiologic process. In the virgin disorders of menstruation of whatever nature are nearly always dependent upon the defective nutrition of the reproductive organs, and this, in turn, upon a blood supply insufficient in quality or in quantity. In the great majority of cases, therefore, our efforts to aid nature in effecting the transformation of the girl into a woman should be in the line of a happy balance of nutrition between the special female organs and the body as a whole.

Hygienic measures are of the first importance. Fresh air and sunshine are always in order. Exercise is especially indicated for the fat and flabby chlorotic girl, and her diet should be restricted in sugars and starches. The highly active, intellectual girl must rest from her studies and try to become a little lazy. Proper precautions should be taken in regard to reasonable care of the person at the time of the monthly periods. Yet the physician should beware of unduly alarming his little patient, and so bringing about a condition of hypochondriacal valetudinarianism. Simple cleanliness is certain to do no harm, but good. The conservation of the general health and vigor is the chief factor in maintaining safe and easy menstruation.

In spite of hereditary defects, if the physician could have full control of the diet, cloth-

ing, hygiene and environments of the little girls in his clientele up to the date of puberty, but little if any medication would be then required. Unfortunately, however, the lack of harmonious development in the preadolescent period necessitates considerable medical attention to secure a normal course for the critical metamorphosis of puberty, whose influences, as Dudley remarks, are fundamental, not only in the reproductive organs, but in the entire woman. Actual pain at the menstrual period in the young virgin may be considered always pathologic, and the same is true of memorrhagia or very scanty menstruation. Such abnormalities of function should direct our attention to the state of nutrition especially. The obese, chlorotic girl must take more exercise; the thin, delicate, sensitive girl, more rest. Fresh air and sunshine are needed in every instance. Red meat, eggs and other blood-forming foods should be taken in such quantities as can be well borne. The appetite for wholesome nutriment should be encouraged, if need be, by stomachic stimulants, such as the official elixir of strychnin, pepsin and bismuth. The use of bromides, coal-tar analgesics and diffusible stimulants at the menstrual periods can be regarded only as a temporary makeshift.

The most constant and positive clinical sign of imperfect puberty is deficiency of the blood in red corpuscles and hemoglobin, the chlorotic type being perhaps more common than the simple anemic in relation to menstrual disorders. Hemic defects and malnutrition act reciprocally as cause and effect. The oxidizing life of the blood is in the iron it contains, with about one-twentieth as much manganese. The total iron of the adult body amounts to but 2.5 or 3.5 grams, chiefly in the form of hemoglobin. The normal daily content of iron in the food of an average diet, is, according to Stockman, from five to ten milligrams. When absorbed, as in health, this food-iron replaces the metal continually lost by disintegration of blood corpuscles and excretion. The round of iron in the body seems to be from the duodenum to the mesenteric glands, thence to the thoracic duct, the general blood current and the spleen, from where it passes to the liver to be synthesized into hemoglobin for the red cells, on the breaking down of which the dissociated iron is eliminated by way of the large intestine.

The use of iron in anemic and chlorotic conditions is, of course, a cardinal principle in therapeutics. In girls becoming women, to supply a deficiency of erythrocytes or hemoglobin one might infer at first thought that the best method would be to administer

hemoglobin, that is, blood in some form. Chemistry proves, however, that when hemoglobin is taken into the stomach it is changed by the acid there to hematin (causing the coffee-ground color of small gastric hemorrhages), which, according to Cloetta, passes down the alimentary tract without being absorbed.

Most authorities conclude that inorganic compounds of iron, in order to be absorbed, must first be changed to albuminates by combining with food matters. All albuminous substances are hydrolyzed to peptons before they are capable of absorption. Hence it follows that a peptonate of iron is the preparation most likely to be readily and completely absorbed and assimilated. The best remedy of this composition, I think, is Gude's Pepto-Mangan, which I have used for the past ten years with great satisfaction, particularly in the hemic and nutritive disorders of female puberty.

This neutral solution contains three grains of iron and one grain of manganese in each tablespoonful. The latter ingredient is doubtless to be credited with a large part of the nearly specific effect of the remedy in functional menstrual derangements. The preparation is pleasant to the eye, agreeable to the palate and has the great advantage over inorganic iron compounds of not corroding the teeth, deranging digestion nor inducing constipation. According to the nature and severity of the case, the dose varies from a teaspoonful to a tablespoonful. It is well taken in milk or sherry just after meals.

The following brief clinical notes may serve to illustrate the facts above stated. The blood count in each instance was made with the Thoma-Zeiss hemacytometer; hemoglobin was calculated by the Hammerschlag specific gravity method. I need hardly remark that the blood findings at the altitude of Denver are normally higher than at points near sea level.

CASE 1. Josie K., 15 years, thin, delicate and somewhat strumous, had menstruated irregularly and intermittently for 16 months; erythrocytes 3,600,000, hemoglobin 58 per cent. She was taken out of school, put on a diet largely protein, given aloin, strychnin and belladonna pills for her bowels, and for her blood, Pepto-Mangan (Gude), a dessertspoonful four times daily after eating. Under this treatment she made an average weekly gain of  $1\frac{1}{2}$  pounds in weight, about 150,000 red cells and  $3\frac{1}{2}$  per cent. hemoglobin, and was discharged cured in ten weeks.

CASE 2. Alice R., 18 years, rather stout, but pale, with greenish tinge; complained

of palpitation and breathlessness on slight exertion; menstruation barely begun and scanty. She was made to take gradually increasing exercise on her bicycle, a cool bath every morning, less carbohydrates and more proteins in her diet, and Pepto-Mangan (Gude) in the dose above mentioned. She recovered from all her morbid symptoms within four months, and has since married and given birth to two healthy children.

CASE 3. Amelia B., 23 years old, an overworked servant girl, had suffered since the periods first began, nine years before, with marked dysmenorrhœa, the flow being prolonged but rather scanty. The red blood cells numbered 3,800,000 per cu. m. m., with proportionate oligochromia. She was induced to rest at home and take six eggs daily, along with other nourishing food and Pepto-Mangan (Gude), a dessertspoonful four times daily—an hour after food. She made a very rapid recovery, the red cells running up to 4,900,000 within two months and the menstrual periods becoming quite normal. By exercising proper care she has remained well for the past eight years.

CASE 4. Olive M., 13 years, blonde, thin, active, sensitive, a hard student, just beginning to menstruate, the flow being scanty and accompanied with pain. The blood count was 63 per cent. of normal, the color index 57 per cent. Under treatment similar to that mentioned in the first case, she became round and rosy, menstruated freely and easily, took on 17 pounds in weight and raised the blood findings above the normal at sea level, all within eight months.

CASE 5. Fannie R., 17 years, active, ambitious, intelligent, had such excruciating pain all through her menstrual periods for two years as to cause actual wasting. Physical examination revealed nothing abnormal except an undersized uterus. She was given Pepto-Mangan in tablespoonful doses three times a day, and was told to lie with the head lower than the hips. After three months' treatment the periods became quite painless, and have remained so for five years.

CASE 6. Flora J., 16 years old, began to menstruate profusely a year before, since which time she has been always ailing; erythrocytes 3,100,000 hemoglobin 63 per cent. She was given cool baths and massage, a bitter tonic, laxatives and Gude's Pepto-Mangan in dessertspoonful doses. When discharged cured, five months later, the blood count was 4,700,000, hemoglobin 95 per cent.

CASE 7. Maggie W., aged 15, clerk in a

department store, was extremely chlorotic (hemoglobin 28 per cent.), with a soft, systolic basic murmur and some symptoms of gastric ulcer; menstrual molimina, but no flow. She was kept in bed at home, fed largely on meat, fish and eggs, and was given Pepto-Mangan (Gude) thrice daily, a table-spoonful at a time. The functional murmur soon disappeared, the iron in the blood came gradually up to normal, the patient lost in weight as she gained in health, and menstruation appeared regularly.

CASE 8. Nora R., 14 years, healthy in appearance, but neurasthenic; no trouble with menstruation, except at this time she became more nervous and developed a rapid pulse and some swelling of the thyroid gland. For this incipient exophthalmic goiter she was kept in bed with a cold pack over the thyroid at the menstrual period, and was given Pepto-Mangan (Gude) steadily for six months, in dessertspoonful doses. She has been quite well and free from the symptoms mentioned for over a year.

In conclusion, the writer would like to emphasize the peculiar physiological efficacy of Pepto-Mangan (Gude) in aiding young girls to a normal womanhood, when the crisis of puberty is complicated with any defect in blood-making and nutrition. Its action is prompt and pleasant, and the clinical benefits derived from its use are readily apparent to all concerned. In curable cases it is as nearly specific as any combination of drugs could be.

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#### The Maltine Prize Essays.

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The two prizes of a thousand dollars and five hundred dollars which the Maltine Company offered last January for the two best essays on "Preventive Medicine" have been awarded by the judges, Dr. Lewis, of New York, Dr. Reed, of Cincinnati, and Dr. Rhodes, of Chicago, who met for a final consultation in Buffalo. A facsimile of their letter of award is enclosed herewith.

Two hundred and nine essays were submitted in competition, and, although nearly every state in the Union was represented in the contest, both prizes were won by Philadelphia men.

The thousand dollar prize was awarded to Dr. W. Wayne Babcock, 3302 North Broad Street, Philadelphia. His essay is entitled, "The General Principles of Preventive Medicine," and was submitted under the nom-de-plume "Alexine."

The five hundred dollar prize was awarded

to Dr. Lewis S. Somers, 3554 North Broad Street, Philadelphia. His essay is entitled "The Medical Inspection of Schools; a Problem in Preventive Medicine," and was submitted under the nom-de-plume "Broad."

The two successful essays will first be published in representative medical journals, and then in permanent form for gratuitous distribution to the profession at large.

The following tabulation will undoubtedly prove of interest to our readers. It shows how the various sections of the country were represented in the competition.

Alaska,	1	Montana,	2
Arkansas,	1	Nebraska,	2
California,	6	New Hampshire,	1
Colorado,	4	New Jersey,	4
Connecticut,	5	New York,	22
Dist. of Columbia,	3	No. Carolina,	1
Florida,	5	Ohio,	11
Georgia,	5	Oregon,	1
Illinois,	15	Pennsylvania,	25
Indiana,	11	Rhode Island,	1
Iowa,	8	So. Carolina,	2
Kansas,	2	Tennessee,	1
Kentucky,	3	Texas,	2
Louisiana,	2	Vermont,	1
Maine,	4	Virginia,	1
Maryland,	2	Washington,	3
Massachusetts,	12	West Virginia,	2
Michigan,	7	Wisconsin,	10
Minnesota,	7	Ontario,	2
Mississippi,	1	New Brunswick,	1
Missouri,	5	Unidentified,	5

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The report of the Committee of Award is as follows:

BUFFALO, Oct. 18, 1902.

To the Maltine Company, New York.

Gentlemen:—Your committee selected to award the two prizes offered by you for essays on Preventive Medicine, or some subject connected therewith, begs leaves to report that the large number offered in the competition (being two hundred and nine in all), and the general high grade of their excellence, has made the matter of selection very difficult. After critical examination and mature deliberation, however, your committee has awarded

The First Prize to the essay entitled "The General Principles of Preventive Medicine," signed, "Alexine," and

The Second Prize to the essay entitled "The Medical Inspection of Schools; a Problem in Preventive Medicine," signed "Broad."

In submitting this report the committee congratulates you upon the widespread interest which you have aroused in the very important subject of Preventive Medicine, and it congratulates the medical profession and the public upon the great good that will follow the publication of the valuable addi-

tion to literature thus evoked by your enterprise.

Respectfully submitted,

DANIEL LEWIS,  
CHARLES A. L. REED, } Committee.  
JOHN EDWIN RHODES, }

### The Use of Picric Acid in the Treatment of Pelvic Inflammations.

By ARTHUR W. YALE, M. D., Philadelphia.

Our text-books and chemistries contain but meagre information concerning picric acid, and this is equally true of medical literature in general. It is prepared by the action of nitric acid on phenols containing the benzene nucleus, and chemically is known as trinitrophenol, with a formula of  $C_6H_2(NO_2)_3OH$ . In the laboratory it is used as a test for albumen and the alkaloids.

Until within a few years, however, its value as a therapeutic agent remained unknown. Recently it has been recognized as a potent local application in the treatment of burns, and is now used in most of our large hospitals, in the form of an aqueous solution, applied directly to the burned surface; and it has been unquestionably demonstrated that burns thus treated heal more quickly and leave a smaller and smoother cicatrix than results from any other local dressing.

Dermatologists are beginning to recognize the value of this drug in the treatment of skin lesions, and especially in those affections which are accompanied by a pruritus. It was the foregoing fact which led the writer to test the value of picric acid, in his clinic, in the treatment of inflammations along the female genital tract.

Erosions of the cervix being somewhat analogous to skin lesions, it was with these obstinate cases that the initial trials were made. Many of these patients had been unsuccessfully treated with the numerous local applications familiar to the gynecologist, but under the action of picric acid the healing was prompt and in most cases permanent. The best method of application was found to be the dusting of picric acid crystals upon a pledget of cotton, and placing in contact with the undried cervix. These results led to the use of tampons dipped in a saturated solution of picric acid and glycerine, instead of the usual boroglyceride and ichthyol solutions. Here it has afforded more permanent relief than the latter drug, although the analgesic action is somewhat slower. It has been found especially

useful in acute congestion, not only of the vagina and cervix, but in the uterus and its appendages. In many cases where surgical interference was imperative, but refused by the patient, picric acid has held in check the process, although in many cases this was deep-seated.

Among the most stubborn cases which the gynecologist is called upon to treat are leucorrhœas. The time-honored method of combating these complaints has been by means of the douche,—bichloride, permanganate and creolin being the favorites. Picric acid in varying strengths was substituted for these, and, in this connection, a fact more interesting to the physician than to the patient should be mentioned. Some patients were found to be extremely sensitive to the action of the drug, and its use in too large quantities produced erosions upon a hitherto unaffected cervix; and in other cases vaginitis developed, with myriads of minute vesicles, accompanied by a profuse and excoriating discharge and intense pruritus. Notwithstanding these unlooked-for consequences, the majority of the cases exhibited marked improvement, the discharge decreasing, and in most instances its excoriating character and the pruritus ceasing after one or two douches. I determined, therefore, to find a better menstruum than a douche for administering the acid, and induced one of our large manufacturing pharmaceutical chemists to make up some suppositories containing picric acid in different proportions, the advantage of the suppository over other methods of application being in the prolonged time during which the medicament is kept in contact with the affected part. The suppository containing three grains of picric acid has proved most efficacious.

The patient is given several of these suppositories, with the instruction to place one as high up in the vagina as possible, after going to bed. In the morning she should be directed to take a hot douche, preferably while in a reclining posture. This treatment may be repeated every night, or at intervals, according to the severity of the case, every other night in most instances being found sufficient.

The suppositories have a tendency to gravitate to the deepest portion of the vaginal cavity; and, as the vaginal walls are at all times in contact, the medicament is thoroughly spread by the physiological function over the entire mucous membrane, the excess escaping from the vulva, to be caught upon the napkin, which the patient

should be instructed to wear to protect herself.

Picric acid precipitates mucine, and the douchings will be found to contain flocculi thereof, while the vagina is left perfectly clean. It will be observed that leucorrhœas of a gonorrhœal origin can be more thoroughly treated by this agent than by bichloride of mercury. Picric acid being a strong antiseptic and very penetrating, the gonococci, not only in the excretions but those on and in the vaginal mucous membrane, will be killed.

Here, again, the suppositories have the advantage over the douche in keeping this strong germicide in contact with the affected parts during the entire night, and also in keeping the vagina acid, thus inducing the gonococci to come to the surface, instead of burrowing in the glands and membrane to escape the alkaline medium in which they do not develop. A few clinical cases may be cited in corroboration of the foregoing statements.

Mrs. D., age 47, menopause one and a half years ago. Has had one child and one miscarriage, seven and a half years having elapsed since the latter. Leucorrhœa white, profuse, and excoriating. An examination disclosed atresia of the vagina, ante flexion of the uterus, double salpingitis and an enlargement of the right ovary. This patient suffered from a severe cystitis also. All symptoms diminished after the use of the first picric acid suppository (8 grs.). The use of the suppositories has been continued every other night, with the result that the patient has steadily improved. It is no more than just to say that this patient has been to seven different clinics of both schools, without any improvement.

Mrs. B., age 31. Has had four children and one miscarriage. The entire uterus was enlarged, congested and "flabby," with a bilateral tear and laceration of the cervix. There was prolapsus due to a rectocele, cystocele and a badly torn perineum. This patient also suffered from a profuse leucorrhœa. Her first visit to my clinic was made on October 20, 1899. Boroglyceride and ichthyol tampons were used, iodine was applied to the eroded surface, and permanganate, also bichloride douchings, were employed, but with slight benefit, the profuse leucorrhœa still continuing. On January 1, 1902, the first picric acid suppositories were given, with directions to use one every night. On January 7 the discharge entirely ceased and there has been none since. The uterus has contracted, the erosion of the cervix entirely healed, and the

patient's general health much improved.

Mrs. T., age 33. Has had two children. A year ago had a double oöphorectomy. There was atresia of the vagina, accompanied by a profuse discharge, the latter causing cystitis. After the first suppository the discharge decreased, and the cystitis, as well as the patient's general health, improved.

Suppositories made according to Dr. Yale's formula are now prepared by John Wyeth & Brother, of Philadelphia.—*Hahnemannian Monthly*.

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#### Address of Welcome.\*

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By EX-JUDGE EDWARD HARVEY, of Allentown, Pa.

#### *Gentlemen of the Medical Society:—*

It is, I can assure you, personally very gratifying to welcome you, the representative members of a learned profession, to our city and to our homes. Our resident physicians, who are deservedly esteemed by all of us, knew when they invited you to hold your sessions here that a cordial greeting awaited your coming. You were not invited to assist in eradicating an epidemic or for consultation on the best method to check contagion. We claim for our city that it is the healthiest and cleanest of any in the state. You were not invited, and we do not need you, to minister to our afflictions. We wanted you as friends, scholars, humanitarians, and as such we cordially ask you to take bread and salt at our doors under the inspiration of a generous hospitality.

You have been formally received and welcomed by the mayor of our city in a most fitting speech; you have been welcomed by your professional brethren palm to palm in the bonds of fraternal fellowship; just why a member of the legal profession was invited publicly to welcome you again I am unable to understand. If a clergyman had been honored with the invitation, it would have been manifestly more appropriate, for all of them are doctors now *gratia universitatis vel collegii*. Your professional services are engaged to treat by widely different methods the patient before death, while we are rarely required to act professionally until after the interment and it has been pretty definitely ascertained that there is something for distribution. But while there is so little in common between our respective professions, we are occasionally required to examine into your methods,

to criticise your treatment and upon rare and regrettable occasions to use our persuasions to convince a jury that you are not the culpable cause of unfortunate results. There is, however, no antagonism. The principles of law are recognized as the most efficacious means known to preserve order and insure happiness. They apply, or should apply, equally and without discrimination to all the various conditions of society. These and some more thoughts in the same line have led me to conclude that I was invited to advise you, as an aggregation of clients—a combination, in the commercial language of the day—upon some matters personal to yourselves, and in which the state and its inhabitants have and always will have a profound interest. Certainly you do not vainly regard yourself as too considerable to be advised, and you are all of opinion with the clergyman in "Sir Roger de Coverley," "that it was not quality, but innocence, which exempted men from reproof."

For my purpose tonight, and I must be brief, it is immaterial what the early history of your profession may have been or to what standard of efficiency it has attained. It is unimportant what your position was with the Roman Patrician, where your predecessors were slaves, or in London, where they were barbers and druggists. As knowledge was generally disbursed, as the experiments and logic of the philosopher gradually removed the clouds that so long obscured the vision of intelligence, as the terrible shackles of an oppressive superstition were broken, as able men were investigating and inquiring deductively and inductively into things nearest to us, a radical change was affected, not only in your profession, but in the intelligence of the civilized world. The changes were wrought with no extraordinary means—they never are. Such changes occur, and will always occur, when a people rely on the knowledge of their ablest men, the subjects to which that knowledge refers and the extent of its diffusion among all classes of society. It took the world centuries to dissociate the profession of physics from the priesthood; it took it centuries to deny successfully that magic was an essential part of the formulary of the practice of medicine, and that mysteries and incantation were correct modes of treatment. When the world found out its errors, and able men were able to admit them, the spirit of inquiry, the spirit of healthy skepticism, brought to light new theories and new discoveries, all in the interest of progress and intelligence.

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\* Delivered before the Fifty-second Annual Meeting of the Medical Society of the State of Pennsylvania, at Allentown, Pa., September 16th, 1902.



Your profession has made great advances along philosophical lines, and today it justly holds a prominence greater than in all recorded time.

There is, however, one matter about which I desire to address you with emphasis. It is that of your position as expert witnesses in trials at law or equity. Through learning, standing and experience you are, or should be, qualified to aid in the solution of judicial problems. No better or surer method of arriving at the truth in controversies between men than trial by jury has been devised. There are involved at times certain categories of fact that are not understood by laymen, and resort must be had to the opinions of scientists and artists to have them explained. These opinions are given under oath and in court by what are called experts. What do we understand by expert testimony? An expert is "a person of large experience in any particular department of art, business or science." It implies, as Mr. Justice Redfield, in his edition of "Greenleaf on Evidence," well says, "both superior knowledge and practical experience in the art or profession," and no one can be considered an expert who does not thoroughly understand the science or art he is called to explain. Mr. Justice Doe says, "An expert must have made the subject upon which he gives his opinion a matter of particular study, practice or observation, and he must have particular special knowledge on the subject."

By the Roman law *artis periti* were summoned by the *judex* to inform him as to physical laws and phenomena. As early as 1532 the Emperor Charles V., in a code framed at Ratisbon, enacted that the opinions of medical experts shall be taken in all cases in which death was supposed to have been occasioned by violence. The same rule was observed in France in 1606, and in England as early as 1553. At the present time the rules have been enlarged and made more general, so that opinions are now received on all subjects that require this form of aid to enable the courts to reach true and correct results.

You will observe that the law admits expert testimony when the witness through professional training and experience is qualified to throw light on the mooted question. The value of such testimony varies with the ability, experience and information of the witness. If the witness has had no personal experience, and the opinion he presumes to give is the result of reading alone, his testimony is worth little or nothing. Lawyers and judges can read as well as he; they can,

after reading, form a theory as well as he, and such testimony is worth less than nothing. Merely gathering theories or facts from books does not qualify a witness to be of any aid in our courts. You cannot build a house by accumulating materials. Knowledge of how to use them and skill in using them are required, and this skill is the result of experience.

Very frequently physicians censure lawyers for the severity of their examinations. This is unjust censure. Lawyers never are severe when a witness is honestly and intelligently insistent and bases his opinions on scientific principles. When, however, the witness is inexact, doubtful or apparently prejudiced, he must expect a searching examination, for the law and justice demand it. He has no right to testify as a witness if he knows he is without the qualification of an expert. He obscures the question, trying by the use of such expressions, "it is possible," "it may be so," "it is likely." If the hypotheses presented by the facts of the case are fairly stated to him, he should give an opinion on them; if they are not fully and fairly stated, he should require them to be made so before he ventures his opinion.

Then, again, the tendency of expert testimony to be conflicting weakens it. Professional witnesses are not examined upon mere abstract questions of science which have no relation to the facts in evidence before the court. Their opinions are to be given only on the facts in evidence—sometimes the whole evidence and sometimes important parts of it. Each party to the action selects his own experts. Frequently they assist the attorneys in preparing phases of the evidence. As they are employed by one side only, and in some cases paid liberally, they are consciously or unconsciously influenced so as to see only what the side needs that retain them. As a consequence we sometimes find witnesses of equal merit and distinction testifying to opinions apparently opposite. An eminent law writer in an English law magazine, commenting on this state, says with great force: "Instead of appearing as assistants to the court in determining upon what is most for the public good, the wildest theories are enunciated; science and health are insulted in the interests of costs and personal notoriety; dust is profusely thrown in the eyes which ask for light, and the unavoidable inexperience of the court is compelled to a decision which those who really cause it know to be wrong, or at least do not think to be right. On some special branches of inquiry the same



two eminent experts are as well known as those of two rival village politicians, confront each other daily."

Surely this state of affairs is deplorable. The professions of medicine and surgery must be able to know that it is not difficult to distinguish between wounds inflicted in life or after death. I recall a case in which such eminent men as Dr. Agnew, Dr. Forbes and Dr. Ashhurst testified positively that certain abdominal wounds on the body of a corpse were inflicted after death. In opposition to this conclusive testimony of eminent scientists, three country doctors testified that in their opinion they were inflicted in life. Learning, experience, skill and standing counted for nothing in the scale of justice and were ignored by the jury in rendering their verdict.

If the evidence raises questions of great doubt, learned men may yet disagree. Lord Tenterden once said that the line between sanity and insanity is as indistinguishable as the line of demarcation between daylight and dawn. Upon the question of insanity we expect to find disagreements in the opinions of professional witnesses. There are no fixed and invariable rules for gauging the sanity of men. What in one temperament would indicate a disordered intellect, in another might be compatible with perfect sanity. But upon the ordinary questions which arise in our courts there is no excuse for radically divergent opinions, and the layman explains them as the consequence of prejudice, bias or favoritism. "Who shall decide when doctors disagree?"

Another criticism must be made. You persistently use in your testimony technical language that cannot be understood by the average layman. If your opinions are to receive their deserved weight and are to be used in ascertaining truth in the administration of justice, the jurors and judges must know what they are. The English language is rich in words. It is comprehensive and elastic. It boasts of samples of literature that are unequalled in the languages of the world. Its poetry, its philosophy, its theology and its histories and fiction stand prominently out as masterpieces of style and substance. The law in our country and in England requires that all proceedings in courts shall be in the English language. Yet you come in as witnesses and use words derived from the classical but dead languages of almost forgotten centuries; and I have always discovered that those professional witnesses who have the least classical training and the meagerest educational advantages

use the most technical terms. This should be avoided, and I am glad to say it is not practiced by eminent scientists who understand and appreciate the relation they bear, when witnesses, to the proper administration of justice. I cannot help quoting a paragraph from a delightful little book written by Anatole France, called "The Crime of Sylvestra Bennard": "These ills, which are the bane of man, have names which are the bane of the philologist. They are hybrid names, half Greek, half Latin, ending in *itis*, indicating the inflammatory state, and in *algia*, expressing pain. The doctor was there with a number of adjectives ending in *ic*, which serve to characterize their detestable qualities—in short, a good half of the complete copy of the medical dictionary contained in the too authentic box of Pandora."

I have spoken to you with freedom, but set down naught in malice. By emphasizing critically what I regard as evils deserving correction, I do not wish to be understood as minimizing the high position the civilized world has accorded you. Your profession has taken the first rank in practical science and is easily holding the lead. Bring yourself in closer touch with mankind for whom you minister, and add to your usefulness the ability to aid, as professional witnesses, the courts of justice, so that we can lean on you as a supporting staff, and not, as is now too frequently the case, as a broken reed.

Emerson has somewhere said: "The destiny of organized nature is amelioration, and who can tell its limits." This universal law is nowhere more manifest than in the progress of the world in social, political and scientific achievements. The world advances slowly. It takes centuries to work permanent changes. The equality of man was not established until the divine right of kings was overthrown. Liberty of conscience was not secured until the battlements of superstition were attacked. It has been said that it requires ages before the intellectual advancement of a people can be expressed in a maxim. The operations of this law are peculiarly observable in the advance made in the art and science of medicine and surgery. When the civilized world was engaged in human slaughter, no thought was given to prolonging life and administering to the health and happiness of mankind. Now, since the civilization of the present is based on the brotherhood of man, everywhere is seen the helping hand. Human sympathy is extended to all forms of afflictions. Surgery has called to its aid anesthetics, listerism has been discovered to protect the healing wound, adrenalin to stop the unnecessary

loss of blood, and the X-rays to photograph the inner organs, tissues and muscles, so that the diagnosis may be a demonstration. All of the great discoveries are used in charity to ameliorate mankind; "and the thoughts of men are widened with the process of the suns." Who can tell where destiny may yet lead? Your great discoveries, experiments and demonstrations entitle you to a high place in the boundless benevolence of mankind, and I can close with no fitter words than those of Voltaire:

"Men who are occupied in the restoration of health to other men, by the joint exertion of skill and humanity, are above all the great of the earth."—*Philadelphia Medical Journal*.

#### The Treatment of Phthisis With Blue Light.

Kaiser, after making a series of investigations on this subject, draws the following conclusions: (1) Tubercle bacilli in pure culture were killed in thirty minutes by the blue light at a distance of five metres, while they survived the equal illumination by an ordinary arc lamp. (2) Tubercle bacilli in pure culture were pasted on the patient's back, and the blue light was directed on the patient's chest at a distance of five metres for thirty minutes; this was repeated for six days. The bacilli were "weakened". (3) Pure culture of tubercle bacilli were illuminated by a light concentrated through a hollow lens containing a solution of alum and methylene blue with ammonia; they were killed. (4) The same lens was used, and the light was split up into the spectral colors by means of a carbon disulphide prism. Cultures lived in red and yellow light, but were killed in from blue-violet to ultra-violet. (5) A photographic negative with an unused film was pasted on a patient's back in such a way that all light was excluded. The film was illuminated through the patient's body, and a blurred "positive" was obtained.

Following these experiments, Kaiser tested the blue light in two cases of advanced phthisis; after six days night sweats ceased and cough became less; after six weeks (up to the present) diminution of bacilli in sputum. In a case of tuberculous abscesses in the thigh and knee flexion, all treatment that had been applied before (for three months) failed to do any good; as a result of blue light there was healing of all abscesses in four weeks. A case of "weeping" eczema in a child of "tuberculous character" was cured in five weeks.

The author concludes that (1) blue light kills tubercle bacilli; (2) the heat rays are excluded by the hollow lens with cooling arrangement; (3) action of the light is independent of the distance and intensity of the source of light; (4) the light can pierce the body sufficiently strongly—only the chemical rays do so; (5) pure blue light acts strongly as a resorbing agent, and (6) blue light has a local sedative action if the rays are concentrated, and may even produce anesthesia.—*Wien. Klin. Woch.*

#### The Diagnosis of Stone in the Bladder.

By A. GROVES, M. D., Fergus.

The diagnosis of stone in the bladder is by no means theoretically difficult, but in actual practice the existence of a stone is often overlooked, even when its presence is suspected and search made for it. There came recently under observation a patient with symptoms of stone in the bladder, but nothing could be found by sounding, although this had been done on two occasions by one of the oldest surgeons in Canada, who gave a positive opinion that there was none present, but the symptoms came from a large and sensitive prostate. Shortly after he came under my care, and by using Bigelow's evacuator the click of a stone against the tube was quite distinct, and, on operating, its diameter was found to be slightly over an inch. The reason it was missed by the sound was because it lay deep down behind the greatly enlarged prostate so that the sound passed over it. With the evacuator the outward rush of water drew the stone against the tube with a distinct click. A second case was presented, in which the most careful sounding failed to find a stone, but with the evacuator not only was it found, but, being of small size, it came away in the eye of the tube. Given then the ordinary symptoms of stone, and if the sound does not reveal it, I make it an invariable rule to use the evacuator, and if with this no stone is found, the evidence is pretty conclusive that none exists unless indeed it be encysted, and in my experience this is an exceedingly rare condition. In children the large tube cannot be used, nor is there indeed great need of the evacuator with them for there is no prostatic hypertrophy and the contractile bladder will usually bring the stone at once in contact with an ordinary sound.—*The Canadian Practitioner and Review*.

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## News and Abstracts.

### Mississippi Valley Medical Association.

The twenty-eighth annual meeting of the Mississippi Valley Medical Association was held in Kansas City, October 15, 16 and 17. The following officers were elected for the ensuing year:

*President*—Edwin Walker, M. D., Evansville, Ind.

*First Vice-President*—Hugh T. Patrick, M. D., Chicago, Ill.

*Second Vice-President*—Wm. Britt Burns, M. D., Memphis, Tenn.

*Secretary*—Henry Enos Tuley, M. D. (re-elected), Louisville, Ky.

*Treasurer*—Thos. Hunt Stucky, M. D. (re-elected), Louisville, Ky.

Chairman Committee of Arrangements.

Next place of meeting, Memphis, Tenn., October 7, 8 and 9, 1903.

### Important Incompatibles.

Acacia (gum) with alcohol, ether, iron, lead water, mineral acids, borax and ethereal tinctures.\*

Acids (in general) with alkalies and weak salts of other acids, as the bromides, chlorides and iodides.

Arsenic with tannic acid, salts and oxide of iron, lime and magnesia.

Bitter infusions and tinctures with salts of iron and lead.

Bromides with acids, acid salts or alkalies.

Bismuth subnitrate with subchloride of mercury, sulphur and tannin.

Calomel with alkalies, mineral acids, lime water, metallic acids and potassium iodide.

Carbonates with acids and acid salts.

Camphor with water.

Chlorides with silver salts, lead salts and hydrogen peroxide.

Chloroform (except in very small proportion) with water.

Corrosive sublimate with alkalies, lime water, salts of iron and lead, iodide of potassium, albumen, gelatine and vegetable astringents. It is, however, sometimes combined with the chloride of iron, arsenious acid or potassium iodide.

Chloral hydrate with alkalies, ammonium and mercury compounds, potassium bromides and alcohol.

Digitalis with iron and preparations containing tannic acid.

Hydrogen peroxide with vegetable tinctures, alkaline citrates and tartrates, ferric salts, hydrocyanic acid, sulphates, chlorides and nitrates.

Iron (salts) with anything containing tannic acid, tincture of the chloride of iron with alkalies, carbonates, mucilages and preparations containing tannic acid.

Iodine with ammonia,\* alkalies, carbonates,\* chloral, metallic salts and starch.\*

Lead acetate with acacia, hydrochloric acid, sulphuric acid and sulphates, ammonium chloride, carbonates, lime water, iodine, potassium iodide, tannin.

Mucilage with acids, iron salts and alcohol.

Oxidizing agents, as chromic acid, potassium nitrate, chlorate and permanganate, nitric and nitro-hydrochloric acids, should not be prescribed with oxidizable substances, as glycerine, sugar and other alcohols, oils, ethers, turpentine, sulphur and sulphides, phosphorus or dry organic substances.

Potassium iodide with all strong acids and acid salts, alkaloids, iron, lead and mercury salts, potassium chlorate, chlorine water and silver nitrate.

Potassium permanganate with ammonium salts, alcohol, ethereal oils, organic substances and glycerine.

Salicylic acid with iron compounds, potassium iodide and lime water.\*

Sodium bicarbonate with acids, acid salts, tannic acid, alkaloids and metallic salts.

Sodium bromide with acids (mineral), chlorine water and mercury compounds.

Silver nitrate with acids, except nitric, alkalies, carbonates, iodides, bromides and sulphur.

Spirits of nitrous ether with sulphate of iron, tincture of guaiacum and most carbonates.

Tinctures of gums or resins with water.

Vegetable preparations containing tannic acid with salts of iron or lead.

Liquid extract of Pichi, a valuable sedative in affections of the bladder and urinary organs in general, will not mix with water, but the addition of Liquor Potassæ renders it compatible, and, in most cases calling for its administration, adds to its efficacy.

See notice in this number of a good chance to buy dental and medical books at a bargain.

### Rigid Os.

Rigid os is oftentimes a purely spasmodic affection; and many physicians report that they find a few doses of Hayden's Viburnum Comp. gives quick relief and labor proceeds normally.

\*Those marked with the asterisk are sometimes prescribed in small quantities.--[Compiled by C. C. Sherrard, Ph. C., from various sources.--*The New Idea*.]

THE BEST RESULTS ARE ASSURED IN BROMIDE TREATMENT WHEN YOU SPECIFY

# PEACOCK'S BROMIDES

AND THE GENUINE IS DISPENSED.



NEUROLOGISTS and General Practitioners prefer it because of its superior qualities over the commercial salts. . . Each fluid drachm represents fifteen grains of the combined chemically pure Bromides of Potassium, Sodium, Ammonium, Calcium and Lithium.

DOSE: ONE TO THREE TEASPOONFULS, ACCORDING TO THE AMOUNT OF BROMIDES REQUIRED.

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From CHIONANTHUS VIRGINICA.

**R**E-ESTABLISHING portal circulation without producing congestion. Invaluable in all ailments due to hepatic torpor.

Hepatic  
Stimulation.

Without  
Catharsis.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES A DAY.

FOR CLINICAL TRIAL WE WILL SEND FULL SIZE BOTTLE TO ANY PHYSICIAN WHO WILL PAY EXPRESS CHARGES.

**PEACOCK CHEMICAL CO.**  
ST. LOUIS, MO., U. S. A.

In CARDIAC and GENERAL MUSCULAR RELAXATION,  
due to Functional Cardiac and Circulatory Disturbances,

# CACTINA PILLETS

Has many Advantages over other Heart Stimulants.

IT HAS NO CUMULATIVE ACTION, AND  
IS ABSOLUTELY SAFE AND RELIABLE

EACH PILLET REPRESENTS ONE ONE-HUNDREDTH OF A GRAIN CACTINA, THE ACTIVE PROXIMATE PRINCIPLE OF CEREUS GRANDIFLORA

DOSE: ONE TO FOUR PILLETS THREE TIMES A DAY.

SAMPLES MAILED TO PHYSICIANS ONLY.

The CHIEF Characteristics of the Physiological Action of

# SENG

Is to promote Normal Digestion by encouraging the flow of Digestive Fluids.

It is the Modern and Most Successful Treatment for

**INDIGESTION.**

A PALATABLE PREPARATION OF PANAX SCHINSENG  
IN AN AROMATIC ESSENCE.

DOSE: ONE TO TWO TEASPOONFULS THREE TIMES  
A DAY.

A FULL SIZE BOTTLE, FOR TRIAL, TO PHYSICIANS WHO WILL PAY EXPRESS CHARGES.

**SULTAN DRUG CO., St. Louis, Mo., U. S. A.**

No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.

### Suspension of the Uterus.

Dr. Hunter Robb, Cleveland, Ohio, in speaking of the advantages, disadvantages and results of suspension of the uterus, insisted that suspension and fixation are not interchangeable terms, the latter procedure being always undesirable. Before we are able to speak with certainty as to the results we must have more accurate data, which can only be obtained by a more rigid classification and a subsequent analysis of sufficiently larger series of, 1, uncomplicated cases of malposition; 2, those cases of malposition in which other pathologic conditions are present, but in which the malposition is the indication for operation; 3, those cases in which the suspension is only a supplementary operation.

Robb believes that in suspension we have a method of permanently relieving a large percentage of patients suffering from obstinate retroflexion. Difficulties in future pregnancies are mainly the result of fixation operations and not of suspension. Hernias, adhesions and localized or general sepsis are due to faulty technic and should not occur.—*Jour. A. M. A.*

### Panopepton in Typhoid Fever, Clinical Reports.

Man, thirty years old. Had been ill with fever eight days before receiving medical attention. Very emaciated condition; no bowel movement for ten days. Milk given for two days and doses of calomel; could not digest milk—curds in stools and it had to be discontinued. Began giving Panopepton, one dram every two hours, and four ounces of buttermilk, three times a day. No other food given through the five weeks of low fever, which was very strong typhoid. After fever had subsided and on the ninth day of convalescence, a dose of calomel and a little beef broth were given. The very next day temperature went up to 103°. At this period, everything discontinued, but Panopepton, one dram every two hours, and during relapse of three weeks nothing else given. After the eleventh week from commencement of the illness, the patient was in fine condition and weighed six pounds more than ever before in his life.

SOMETHING OF A REBUFF.—Mr. Goslin: "I dreamed lawst night—aw—that you and I were mawwied—aw—Miss Amy."

Miss Tenspot: "You call that a dream, do you?"

Mr. Goslin: "Yaws, of cawse."

Miss Tenspot: "If I had dreamed that I should call it a nightmare."—*Judge.*

### The Influence of Acute Disease on Insanity.

By DR. D. ED. WARREN.

The onset of acute diseases during the course of mental affections is apt to cause either improvement or a cure. Some alienists have suggested, on that ground, that insane cases be inoculated with the poisons of acute diseases. An Italian alienist reported some cases which he had treated successfully by injecting turpentine hypodermically and thus caused the formation of abscesses. Some writers even suggested the erection of hospitals in malarial districts, in order that the patients might be exposed to the malarial infection. The proposition was based on the improvement that followed such infection by accident, in seven cases out of twenty-four. The author reports four of his own cases, in which he traces recovery to the action caused by acute diseases. He supposes that the toxic elements of the respective diseases probably act on the toxic elements in the blood found during the course of the various forms of mental diseases.—*Brooklyn Medical Journal*, April, 1902.

### Jaundice.

I have given Chionia a fair test in the case of an anemic old woman who was much debilitated and had a very severe attack of jaundice. I prescribed Chionia, and the results were a speedy and complete cure.

L. T. PRATHER, M. D.

Marshall, Mo.

Dealer: "This is a twin-burner gasoline stove."

Mrs. McGee: "Faith, awn thin Oi don't want it. Do yez t'ink I want inyt'ing that will burn me twins?"

### Is the American College to Go?

It seems only yesterday that we were shocked at President Eliot's proposal to give the bachelor's degree for three years' work at Harvard. And now comes President Butler with his plan for putting the same thing, or another "just as good," on the market at the price of only two years' work at Columbia. If this competition continues, some shrewd business-like university will soon be advertising first-class bachelor's degrees while you wait; near B. A.'s, which look like the real thing and wear better; already put up; sent to any address upon receipt of price; freight prepaid; club rates for large quantities; agents wanted.

"Is the American College to Go?" was the

*Doctor:*

*When seeking a  
palatable and highly  
nutritious liquid food to  
maintain a patient's  
strength during critical  
illness, remember NUT-  
RIENT WINE OF  
BEEF PEPTONE.*

---

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*CHICAGO*



caption of an editorial in the *New York Sun* on President Butler's move. It declared that it was in the "desultory reading" and "comradeship" which make up a part of their four years' course that college men in the world today got the best of their education. "The country can do without the graduate schools, without fourth-year law or fifth-year medicine, even without the important dissertations of doctors of philosophy, better than it can do without these two years of college life that President Butler wants to cut off."—*The Princeton Alumni Weekly*.

### La Grippe.

The predisposing causes of this disease are few. Young adults and old persons are most susceptible to attacks, because the former needlessly expose themselves and the latter, from the wasted condition of their organs, have less power to resist the subtle and progressive advances of the disease. Its initial manifestations are generally limited to the mucous membranes of the respiratory passages and nervous system, and here it is that Daniel's Conct. Tinct. *Passiflora Incarnata* may be employed with a certainty of beneficial results. Being a sedative and tonic, it controls and relieves muscular and nervous exhaustion; brings the patient into a composed and healthful state of convalescence, and leaves the heart strong and the nervous system normalized.

### Disturbances of Hearing and Speech of Hysterical Nature.

By DR. SHEPTELICH-KHERZESKO.

An adult man, negative heredity, but a brother had had an attack of hysterical aphasia subsequent to a fright. The patient suddenly lost his power of speech, after a fright caused by an imaginary vision of an old man in the dark. The hearing was lost first and the speech afterwards. There was some disturbance of the general sensibility in the beginning of the disease, but the sensibility was normal in and around the auditory canals. Cataleptic phenomena were marked. The patient could make himself understood through writing and his intelligence seemed to be perfectly normal, but he could not hear any sounds nor could he pronounce any word. Hypnotism was tried, but the results were negative. Dr. Joire's method was tried: The fingers were placed on the auditory canal and kept in place some two minutes, when the brain is supposed to have had ample time to perceive the sensation of contact; then the fingers were suddenly

withdrawn. In Dr. Joire's cases this method was followed by success; here, however, some method would have been necessary which would have impressed the patient as being miraculous, considering his deep superstitious beliefs.—*Rousski Medizinski Vestnik*, March 1, 1902.

NATURALLY.—Student: "How is it, doctor, that I always take a cold in my head?"

Doctor: "It is a well known principle, sir, that a cold is most likely to settle in the weakest part."

### Chronic Vulvitis.

In a recent text-book by a celebrated New York gynecologist, special stress is laid upon vaginal douches of hot water, supplemented by an astringent antiseptic in this condition. For this purpose Micajah's Medicated Uterine Wafers are particularly adapted. After a thorough flushing with hot water, insert a Micajah Wafer into the vaginal canal up to the neck of the uterus. The convenient form in which these wafers are presented to the medical profession renders them superior to other means of applications, such as tampons, powders, etc., which they also surpass in efficacy and freedom from the irritating action.

M. Labord, writing on cerebral localization, says: "Excitation within the limits of the Rolandic zone produces convulsive movements on the opposite side; when the excitation is caused outside this region, however, it spreads in the cortical substance and causes epileptic phenomena to take place. From this experiment it seems that an epileptiform attack does not necessarily correspond to an excitation in the Rolandic region; that an excitation in a cerebral region distant from the Rolandic is also apt to cause such convulsions. Finally, there seems to be some suggestive idea, in this connection, of the supplementary action of the Rolandic areas by some other cerebral areas. From a clinical standpoint the fact is most confusing, as it becomes impossible to make an absolute medical or surgical diagnosis under all circumstances. The author had five cases of the nature here considered."—*Progres Med.*, No. 47, 1901.

USUALLY THE CASE.—Little Elmer: "Papa, what is a bigot?"

Professor Broadhead: "A bigot, my son, is a person who is absolutely certain of something he knows nothing about."—*New York World*.

## Tones up Depressed Vital Organs

**C**OLDEN'S LIQUID BEEF TONIC quiets irritable, unsteady nerves; supplies a nutritive tonic-stimulant which enriches blood and forms tissue; imparts a staying and resisting power to the nervous system; dispels melancholic tendencies; puts the patient on a normal basis for regaining strength.

Often when all other medication has failed, the patient has begun at once and continued to gain steadily on Colden's Liquid Beef Tonic.

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## A PURGATIVE *For Mucous Membrane*

INDICATED IN ALL CATARRHAL CONDITIONS, ESPECIALLY

## NASAL CATARRH

"Glyco-Thymoline (Kress) is well adapted for the treatment of catarrhal conditions of the mucous membranes. I have frequently employed it with benefit in nasal, buccal and bronchial affections. Direct local medication is of much advantage in these cases. In some instances we may safely depend on topical measures alone; in those where internal treatment is also necessary, Glyco-Thymoline (Kress) proves an excellent adjuvant."

MEDICAL BULLETIN, Phila., Pa., March, 1899.

**SPECIAL OFFER**

A full-size bottle of Glyco-Thymoline (Kress) will be sent to any physician who will pay express charges. K & O Douche to physicians, 15 cts.; \$1.50 per doz. Retail 25 cts. Remit stamps.

**KRESS & OWEN COMPANY, Chemists, 221 Fulton Street, New York**

**HASTENS RESOLUTION AND FOSTERS CELL GROWTH**

No Physician Can Afford to be Indifferent Regarding the Accurate Filling of his Prescriptions.

It is stated that it is a common custom in Java to overcome insomnia by pressure on the carotid artery. Not only is this practiced in Java, but it is a common practice in India, and it will be remembered that Rudyard Kipling's Kim was put to sleep in this way. The carotid is said to have been known to the ancients as the "arteria soporifera," while in Russia it is called the artery of sleep.

**FIVE POUNDS GAINED IN TWO WEEKS. SATISFACTORY TONIC AFTER LA GRIPPE.**—I think very favorable of Manola, as a reconstructive tonic, as exemplified in my own case of la grippe, complicated with bronchitis. I used one bottle on myself with satisfactory results. I gained five pounds in two weeks. I was fearful for a time that I was becoming tubercular. I believe the make-up of Manola is such as reconstructs the very essence of life. I never felt such a prompt vivifying effect.

R. P. EDDY, M. D.

Providence, R. I.

**INSTINCT.**—Mrs. Goldstein: "Ikey, Ikey! Felix has swallowed a cent."

Mr. Goldstein: "Vot a gread poy! Alretty he wants to shtart in peezeness as a penny-in-der-slot machine."—*Judge*.

According to M. Moulé, domestic fowls are frequently the subjects of tuberculosis, the disease often involving the abdominal organs. *Paté de foie gras* is sometimes almost a pure culture of tubercle bacilli.

**ANEMIC YOUNG PERSONS.**—I find Cactina Pillets gives vigor to anemic young persons. Cactina not only stimulates but apparently strengthens.

LOUIS F. BISHOP, M. D.

New York, N. Y.

**PHYSICAL EXAMINATION OF PUBLIC SCHOOL TEACHERS.**—Chicago demands that her public school teachers shall pass a physical as well as an educational examination before they can be licensed, and as a result there is a plain betterment in the health of both the teachers and of the pupils who think of becoming teachers. This recognition of the duty to the body and physical health has a hundred indirect results of importance. The teacher with good health is a better teacher and exemplar, is more cheerful and healthy-minded, than one in whom the strain of work shows in every word and act. This initiative of Chicago should be followed by all school boards.—*American Medicine*.

#### A Systemic Alterative Effect.

The following from *Gaillard's Medical Journal*, by Dr. A. H. Ashley, of Boston, Mass., will interest our readers because of the original way in which he expresses his pronounced admiration for something tried, trusted and not found wanting. The letter was written to the Antikamnia Chemical Company, and reads as follows:

*Gentlemen*:—Your various combination tablets, as well as antikamnia tablets, have been used by me for a number of years, and I can only say that they have uniformly given me the best results. But, my dear sirs, why have you waited so long to give us the very best combination of them all? I, of course, allude to your "Laxative Antikamnia & Quinine Tablets."

If there is anything known to the medical profession which will take their place in that class of diseases where one wishes to relieve pain, control the temperature, and at the same time produce, by laxation, a systemic alterative effect, it has not been my good fortune to find it. In these cases of severe neuralgia, and particularly in ovarian and menstrual pain, where morphine was our only hope (and where, after its administration, we had indigestion, bowels bound up, nausea, habit, etc.), you have in Laxative Antikamnia & Quinine Tablets a remedy which will, my experience has taught me, replace morphine and meet all requirements.

I am slow to be carried away by enthusiasm for any drug or combination of drugs, but I freely and voluntarily confess that in these tablets you have given to the profession a remedy so effective and reliable in its action that it offers good excuse (or a mitigating circumstance anyhow) for a little effusion from one who, as a general thing, is not given to gushing.

With my best wishes for your future, and many thanks for your elegant preparations, I am sincerely yours,

A. H. ASHLEY, M. D.

#### Women Doctors in Germany.

During the years 1901 and 1902 only one lady took her degree as a doctor at the Berlin University, but altogether during last year no fewer than fourteen ladies have taken medical degrees at German universities. Of these lady students only six were Germans. Five passed at the Halle University, three at Heidelberg, two at Göttingen, one in Berlin, one in Breslau, one at Freiburg and one at Munich.—*Medical Press and Circular*.

The success of the present-day treatment of nervous exhaustion, malnutrition and general debility is largely due to

**GRAY'S**  
GLYCERINE  
**TONIC**  
COMP.

It has become the Standard Remedy.

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# WHAT ARE YOU PRESCRIBING

The necessity of a proper diagnosis in all cases is acknowledged and the remedy you prescribe is of equal importance. In the treatment of Diseases of Women such as

LEUCORRHEA,

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## Micajah's Medicated Uterine Wafers

have gained a most enviable reputation and afford prompt relief if the genuine wafers are used.

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No  
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### Privileged Communications.

A recent court decision in Rockland County emphasizes once more the law regarding privileged communications. A Mr. Jong, having been injured on the Erie Railroad, was attended by Dr. William Coe McKeeby, a surgeon in the employ of the railroad. While in attendance, Dr. McKeeby secured the patient's signature to a written statement concerning the manner in which the accident had occurred. When the doctor was called upon to testify on behalf of the defendant, he was asked whether the plaintiff had not observed the train before it struck him. Opposing counsel entered an objection to this question, on the ground that it was incompetent, being a privileged communication between physician and patient, and this objection was sustained by the court. However, the judgment rendered in favor of the plaintiff was subsequently reversed by the Second Appellate Division, in an opinion by Justice Willard Bartlett, who held that the prohibition in section 834 of the Code of Civil Procedure relating to communications between physicians and patients extends only to *such communications as are necessary to enable the physician to act in his professional capacity*, and does not extend to admissions by the patient of facts having no possible relation to the professional conduct of the physician. This decision permitted the surgeon to testify that, during his visits to the plaintiff, the latter had informed him that he had not observed the train until he was struck.

**THE INEVITABLE.**—"Why don't you make those two tiny children quit fighting?" exclaimed the kindhearted lady.

"Well, miss," answered the mother of the infants, "I done tried, but weren' no use. You see, I done name one of 'em 'Sampson' an' de yuthuh 'Schley,' and a white gemman tole me I might as well give up, 'case dar warn' no hope of 'em ever livin' peaceable."—*Washington Star*.

I have tried your Solution Adrenalin Chloride in eye, ear, nose, and throat cases, and in each instance find it superior to anything I have used. I find the 1 to 10,000 solution suitable for use in conjunctival inflammations, and the stronger solutions most suitable in ear, nose, and throat cases. Your solution of Adrenalin Chloride is invaluable to specialists. You have the best thing on the market.

C. H. PEETE, M. D.

Macon, Ga.

### Pleasant Method of Administering Turpentine.

R Turpentine oil,	3 iij	12
Pulverized acacia,		
Sugar,	aa 3 jv	15
Comp. Spirit lavender,	3 iij	90
Water,	q. s. ad 3 vj	180

M. Sig.:—One to two teaspoonfuls in a little water every three hours.—*Chicago Clinic*.

### Painless Suturing of Wounds.

Dr. Guy Chappell, of Dawson, Georgia, has used Chloretone as a local anesthetic prior to suturing wounds, and with very satisfactory results. The doctor states that he is very much pleased with Chloretone.

**THE SHOW DOWN.**—Ephraim: "He don held foh aces."

Rastus: "Wot did you hold?"

Ephraim: "Mah breff!"—*Baltimore World*.

In the treatment of acute and chronic cystitis I have had entire success with the fluid extract, and also with the elixir of Pichi (P., D. & Co.). In fact, I have not found any medicinal agent superior to the fluid extract of Pichi. It has given me more satisfaction than anything else.

A. G. CROSS, M. D.

Waynesburg, Pa.

### Internal Organs Which May be Influenced Reflexly by Applications to Definite Areas of Skin.

The *brain*, by applications to the head, neck, face, hands and feet.

The *nasal mucous membrane*, by applications to the neck, face, upper dorsal spine, hands and feet.

The *stomach*, by applications to the lower dorsal spine and the epigastrium.

The *kidneys*, by applications to the lumbar region, the lower portion of the sternum, and the feet.

The *bowels*, by applications to the feet and the abdomen.

The *bladder*, by applications to the feet and lower abdomen.

The *liver*, by applications to the lower right chest.

The *spleen*, by applications to the lower left chest.

The *lungs*, by applications to the chest and the thighs and to the upper dorsal region.

The *uterus*, by applications to the lumbar region, the abdomen, the breasts, the inner surfaces of the thighs, the feet, and to the cervix uteri through the vagina.—*Ex*.

Preparation—Par Excellence

**“Fellows’**

**Syrup of Hypophosphites”**

CONTAINS

Hypophosphites of

Iron,

Lime,

Quinine,

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Strychnine,

Potash.

Each fluid drachm contains Hypophosphite of Strychnine equal to 1-64th grain of pure Strychnine.

**Offers Special Advantages**

in Anaemia, Bronchitis, Phthisis, Influenza, Neurasthenia,  
and during Convalescence after exhausting diseases.

Dr. Milner Fothergill wrote: “It (Fellows’ Hypophosphites) is a good all-round tonic, specially indicated where there is NERVOUS EXHAUSTION.”

SPECIAL NOTE.—Fellows’ Hypophosphites is *Never sold in Bulk*, and is advertised only to the Medical Profession. Physicians are cautioned against worthless substitutes.

Medical letters may be addressed to

MR. FELLOWS, 26 Christopher St., New York.

LITERATURE OF VALUE UPON APPLICATION.

### Anæsthesin in the Treatment of Throat Diseases.

Dr. Carl Kassel (*Ther. Monatshefte*, July, 1902,) says that Anæsthesin is valuable as an anesthetic in the treatment of throat diseases, because it does not produce toxic effects like the other anesthetics usually employed locally. The best method of using Anæsthesin is by means of the ordinary steam atomizer, the tongue being stretched forward as far as possible, and the mouth held as near to the funnel as possible. The inspirations need not be very deep. In order to combine a therapeutic effect with the anesthetic action, the author usually mixes Anæsthesin with menthol as follows:

B Anæsthesin,	20 parts.
Menthol,	10 parts.
Olive oil,	100 parts.

The face should be covered with a towel in order to shield the mucous membrane of the nose and eyes from the vapors of menthol. Patients become quickly accustomed to the menthol vapor and tolerate it for long periods at a time.

**PRESERVING ONE'S HEALTH.**—Physician (to patient): "You should take two grains of quinine every hour or half hour."

Patient: "Great Scott! Doctor, isn't that rather often?"

Physician: "No, take it in a little whiskey."

Patient: "All right. Two grains every—how often did you say?"

Physician: "Every hour or half hour."

Patient: "All right, doctor. Two grains every half hour."—*The Retail Druggist*.

J. C. Reinhart, M. D., Toledo, O., writes: "My experience with Glyco-Thymoline has been limited to its use as an intestinal antiseptic and antifermentative, and for this purpose I have been very successful with it.

"Was called to treat a case of dysentery in a young child. I could make no promise of recovery. Child was passing nothing but blood and mucus, and had from fifteen to twenty passages a day. Showed every sign of approaching collapse. Besides other remedies, I used Glyco-Thymoline in teaspoonful doses, knowing its valuable character, and the way the stools cleared up was extremely wonderful.

"In all I treated the patient about twelve days, at expiration of which time my visits ceased. Child is as healthy as any boy today.

"Have also used Glyco-Thymoline in quite a number of cases of typhoid, with equally good results."

An ostrich which was recently dissected at the London Zoological Gardens had in its stomach a small prayer book. This is the first intimation naturalists have had that the ostrich is a bird of pray.

### Hypertrophied Prostate with Difficult Micturition.

For an old gentleman, seventy-four years of age, who was suffering from hypertrophied prostate, with difficult micturition, I prescribed Sanmetto. The results were favorable, and, after taking two bottles of Sanmetto, he was so much improved as not to require the use of the catheter, which he had been compelled to use for several months previous, at least once in twenty-four hours. I have since prescribed Sanmetto in five similar cases, with equally good results.

E. C. CULBERTSON, M. D.

Keith, Ohio.

**A RESULT OF THEIR QUARREL.**—She: "I had to dismiss the waitress to-day."

He: "What for?"

She: "Impertinence. What do you think she said when I told her not to make so much noise in the pantry when we were at meals?"

He: "Don't know, I'm sure."

She: "She said that if you and I would talk more we wouldn't notice it."

Harrington believes that a widely dilated state of both pupils is to a certain extent an indication of tuberculosis or of a tendency to tuberculosis. He does not contend, however, that the sign is infallible, but simply suggestive.

From E. Dreifus, M. D., 8 St. Charles Street, New Orleans, La.: "I wish to state that, like many others, I have yet to find any tonic to equal Fellows' Syrup of Hypophosphites. For cases of nervous depression from excessive business worry, or for any ailments that have a tendency to deteriorate the vital forces, there is nothing that has yet fallen into my hands that can in any manner supply its place."

## A BARGAIN.

Dental, Medical and Miscellaneous Books for sale, to close an estate.

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Can be Worn Day and Night.



PNEUMATIC PADS.

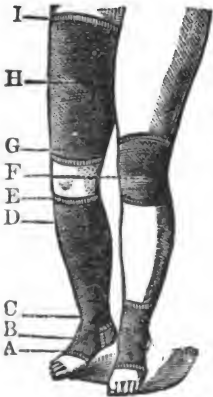
Give circumference of abdomen on line of Rupture.  
State if for Right or Left.

### SINGLE TRUSS, Adults.

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  - C. Silk 2.50
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- A. Plain \$2.50
  - B. Fine 3.00
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## ELASTIC STOCKINGS.

Give exact Circumference and Length in all cases.



### NET PRICE TO PHYSICIANS.

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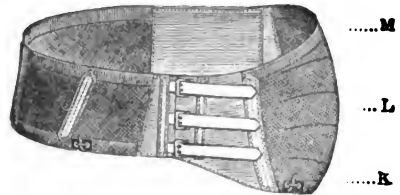
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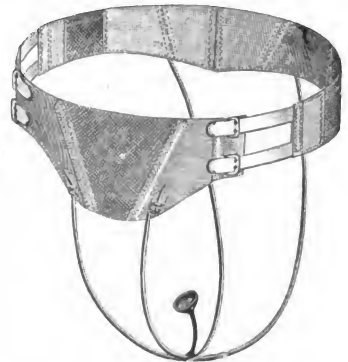
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## STATE SOCIETIES.

**Maine Medical Association.**

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*President*, Hiram Hunt, M. D., Greenville.  
*Secretary*, C. D. Smith, M. D., Portland.  
*Treasurer*, Aug. S. Thayer, M. D., 89 Free St., Portland.  
 Next Annual Meeting will be held in Portland on the first Wednesday, Thursday and Friday in June, 1903.

**Maine Academy of Medicine and Science.**

ORGANIZED IN 1894.

*President*, E. M. Fuller, M. D., Bath.  
*Secretary*, Daniel Driscoll, M. D., Portland.  
*Treasurer*, H. F. Twitchell, M. D., 10 Pine St., Portland.  
 Meets on the second Monday evening of each month at 1.00 o'clock, from November to April inclusive, at the Maine Eye and Ear Infirmary.

**Maine Pharmaceutical Association.**

*President*, Frank R. Partridge, Augusta.  
*Secretary*, M. L. Porter, M. D., Danforth.  
 Next Annual Meeting in Portland, July 8, 9, 10, 1902.

**Maine Dental Society.**

ORGANIZED IN 1865.

*President*, A. W. Haskell, Brunswick.  
*Secretary*, H. A. Kelley, Portland.  
 Next Annual Meeting will be held in Brunswick on the third Tuesday and Wednesday in July, 1900.

## COUNTY MEDICAL SOCIETIES.

**No. Aroostook Medical & Surgical Society.**

ORGANIZED IN 1883.

*President*, W. E. Sincoc, M. D., Caribou.  
*1st Vice-President*, F. A. Hanson, M. D., New Sweden.  
*2d Vice-President*, F. D. White, M. D., Limestone.  
*Secretary*, W. G. Chamberlain, M. D., Fort Fairfield.  
*Treasurer*, Jefferson Cary, M. D., Caribou.  
*Standing Committee*, W. E. Sincoc, M. D., of Caribou;  
 H. F. Kallach, M. D., of Fort Fairfield; S. W. Boone, M. D., Presque Isle.  
 Meets four times a year at Caribou, Me.

**South Aroostook Medical Association.**

ORGANIZED IN JULY, 1901.

*President*, Robert Boyd, M. D., Linneus.  
*Vice-President*, Chas. E. Williams, M. D., Houlton.  
*Secretary*, Fred W. Mann, M. D., Houlton.  
*Treasurer*, Harry L. Putnam, M. D., Houlton.  
 Meets once in three months in Houlton.

**Androscoggin County Medical Assoc'n.**

ORGANIZED JAN. 1, 1868.

*President*, O. A. Sprague, M. D., Turner.  
*Secretary*, A. A. Cobb, M. D., Auburn.  
*Treasurer*, R. R. Ricker, M. D., Lewiston.  
 Meets on the first Tuesday of each month at Central Maine General Hospital, Lewiston, Me.

**York County Medical Society.**

ORGANIZED IN 1891.

Meets quarterly, second week in January, April, July and October at Saco or Biddeford.

*President*, A. H. Weeks, M. D., Bar Mills, Me.  
*1st Vice-President*, H. I. Durgin, M. D., Eliot.  
*2d Vice-President*, C. W. Blagden, M. D., Sanford.  
*Secretary*, L. E. Willard, M. D., Saco.  
*Treasurer*, J. S. Barker, M. D., Kennebunk.

**Kennebec County Medical Association.**

ORGANIZED IN 1868.

*President*, E. P. Marston, M. D., Monmouth.  
*Vice-President*, D. E. Parsons, M. D., Oakland.  
*Secretary and Treasurer*, Wellington Johnson, M. D., Augusta.  
*Standing Committee*, W. P. Giddings, M. D., Gardiner;  
 G. C. Parker, M. D., Winthrop; L. G. Bunker, M. D., Waterville.  
*President and Secretary, Ex officio.*  
 Annual Meeting in May at Augusta. Special meetings called by the standing committee as the interest of the Association may demand.

**Penobscot County Medical Association.**

ORGANIZED IN 1854.

*President*, W. L. Hunt, M. D., Bangor.  
*1st Vice-President*, C. P. Thomas, M. D., Brewer.  
*Sec'y and Treas.*, B. L. Bryant, M. D., Bangor.  
*Executive Committee*, E. T. Nealey, M. D., Bangor; H. T. Clough, M. D., Bangor; E. B. Sanger, M. D., Bangor.  
 Meetings are held on the third Tuesday of each month (excepting June, July, August and September) at the City Hall, Bangor.

**Somerset County Medical Association.**

ORGANIZED IN 1864.

*President*, F. J. Taylor, M. D., Pittsfield.  
*Vice-President*, F. J. Robinson, M. D., Fairfield.  
*Sec'y and Treas.*, H. C. Taggart, M. D., Skowhegan.  
 Meets in June as per call of the Sec'y, at Skowhegan.

**Sebasticock Clinical Society.**

ORGANIZED IN 1897.

*President*, F. J. Taylor, M. D., Pittsfield.  
*Secretary*, E. P. Goodrich, M. D., Pittsfield.  
 Meets at house or office of members on the last Monday of each month from September to May inclusive.

**Franklin County Medical Society.**

ORGANIZED IN 1886.

*President*, A. G. Howard, M. D., Farmington.  
*1st Vice-President*, F. W. Merritt, M. D., Jay.  
*2d Vice-President*, J. W. Nichols, M. D., Farmington.  
*Secretary and Treas.*, H. B. Palmer, M. D., Farmington.  
*Standing Committee*, H. B. Palmer, M. D., Alfred Hitchcock, M. D., Farmington; J. W. Perkins, M. D., Wilton.  
 Meets second Tuesday of June and September.

**Oxford County Medical Association.**

ORGANIZED June 26, 1896.

*President*, J. C. Caldwell, M. D., Buckfield.  
*Secretary and Treas.*, H. L. Bartlett, M. D., Norway.  
 Meetings are held on the last Monday of March, June, September, and December.

**Washington County Medical Association.**

ORGANIZED IN 1897.

*President*, E. H. Vose, M. D., Calais.  
*Vice-President*, S. B. Hunter, M. D., Machias.  
*Sec'y and Treas.*, H. V. Jonah, M. D., Eastport.  
 Meetings subject to the call of the officers.

**Piscataquis County Medical Association.**

ORGANIZED IN 1896.

*President*, R. H. Marsh, M. D., Guilford, Me.  
*Secretary*, C. W. Ray, M. D., Sangerville, Me.  
 Meets at Dover, Me., the third Thursday in February, May, August and November.

## LOCAL MEDICAL SOCIETIES.

**Portland Medical Club.**

ORGANIZED IN 1876.

*President*, C. Y. Lord, M. D., Portland.  
*Secretary*, W. H. Kimball, M. D., Portland.  
 Meets on the first Thursday evening of each month from September to June inclusive at the house or office of members.

**The Clinical Club.**

ORGANIZED IN 1878.

*President*, S. H. Weeks, M. D., Portland.  
*Secretary*, C. O. Hunt, M. D., Portland.  
 Meets at the house or office of members, monthly from September to May.

**Lister Club.**

ORGANIZED IN 1892.

*President*, H. H. Brock, M. D., Portland.  
*Secretary*, Chas. D. Smith, M. D., Portland.  
 Meets at the house or office of members on third Monday of each month throughout the year.

**The Pathological Club.**

*President*, W. L. Cousins, M. D., Portland.  
*Secretary*, R. D. Small, M. D., Portland.  
 Meets once a month.

**The Saco and Biddeford Medical Club.**

ORGANIZED IN 1888.

*President*, C. W. Pillsbury, M. D., Saco.  
*Secretary*, L. E. Willard, M. D., Saco.  
 Meets on the first Thursday of each month at the house or office of members.

**Waterville Clinical Society.**

ORGANIZED IN 1893.

*President*, J. L. Fortier, M. D., Waterville.  
*Secretary*, E. W. Boyer, M. D., Waterville.  
 Meets on the third Monday of each month.

**Bar Harbor Hospital Club.**

ORGANIZED IN 1899.

*President*, William Rogers, M. D., Bar Harbor.  
*Sec'y and Treas.*, John B. Shober, M. D., Philadelphia.  
 Meets fortnightly during Summer.

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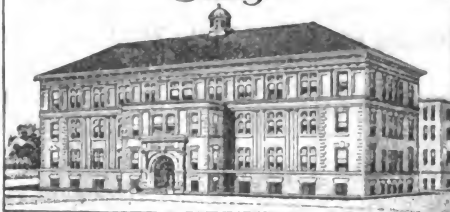
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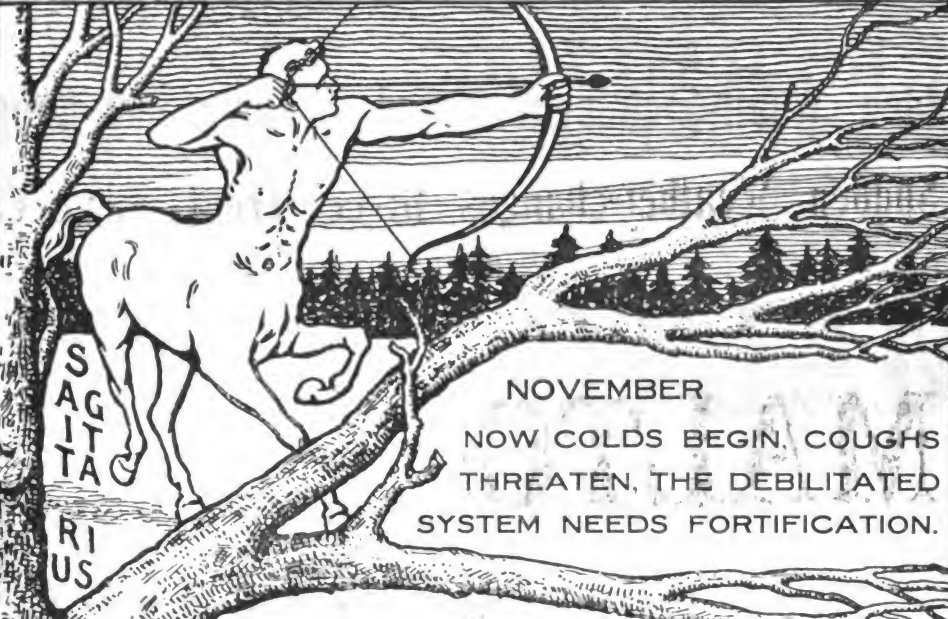
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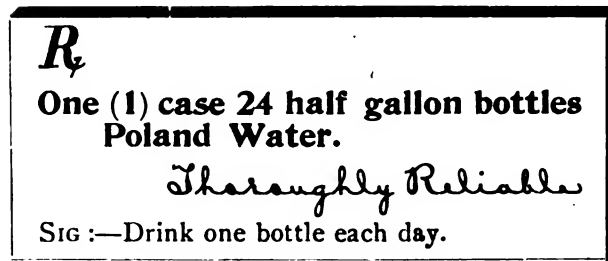
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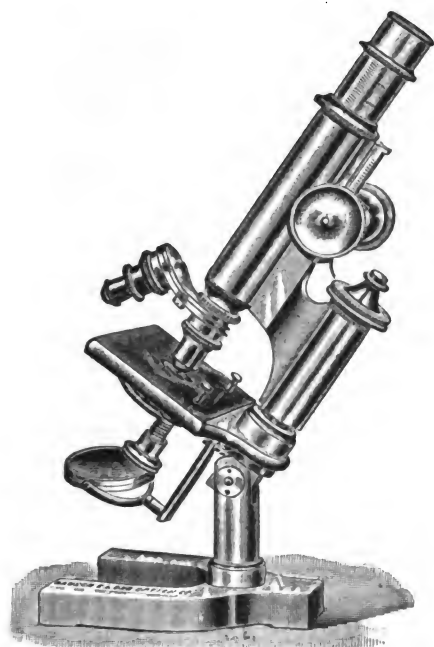
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TO PORTLAND		LEAVE PORTLAND	
LEAVE		FOR	
St. John	6.15 A. M. 4.10 P. M.	St. John	11.05 A. M. 10.45 P. M.
Mattawamkeag	6.50 & 11.02 A. M. 10.31 P. M.	Mattawamkeag	11.05 A. M. 1.10 & 10.45 P. M.
Oldtown	6.25 & 8.35 A. M. 12.30, 7.00 & 11.44 P. M.	Oldtown	7.00 & 11.05 A. M. *12.40, 1.10 & 10.45 P. M. 12.55 Night.
Bangor	7.40 A. M. Sundays only. 7.00 A. M. 1.40, 3.55 & *8.00 P. M. *12.25 Night. 8.35 A. M. Sundays only.	Bangor	7.00 & 11.05 A. M. *12.40, 1.10 & 10.45 P. M. 12.55 Night. 7.20 A. M. Sundays only.
Newport	7.55 A. M. 2.27 and *8.35 P. M. 9.18 A. M. Sundays only.	Newport	11.05 A. M. *12.40, 1.10 & *10.45 P. M. 7.20 A. M. Sundays only.
Foxcroft	6.50 A. M. 1.05 & 4.10 P. M.	Foxcroft	11.05 A. M. 1.10 & 10.45 P. M.
Belfast	7.00 A. M. 1.30 P. M.	Belfast	7.00 A. M. 1.10 & 10.45 P. M.
Pittsfield	8.10 A. M. 2.40 & *9.09 P. M. 9.30 A. M. Sundays only.	Pittsfield	11.05 A. M. 1.10 & *10.45 P. M. 7.20 A. M. 12.40 P. M. Sundays only.
Skowhegan	8.05 A. M. 12.50 P. M. 5.00 A. M. Mondays only.	Skowhegan	7.00 A. M. 12.55 & 10.45 P. M. 5.15 P. M. Sundays only.
Waterville	2.00, 6.00, 8.55 & 8.57 A. M. 12.25, *2.25, 2.35, 3.20, 5.25 & *9.55 P. M. Mondays only. 5.40 A. M. Sundays only, 10.05 A. M. 5.25 P. M.	Waterville	7.00, 10.15 & 11.05 A. M. *12.40, 12.55, 1.10, 5.10 & *11.00 P. M. *12.55 Night. 7.20 A. M. Sundays only.
Augusta	2.35, 6.37 & 9.42 A. M. *3.08, 3.52 & *10.42 P. M. Sundays only, 10.40 A. M. 5.55 P. M.	Augusta	7.00, 10.15 A. M. *12.40, 1.10, 5.10 & *10.45 P. M. 12.55 Night. 7.20 A. M. Sundays only.
Gardiner	2.50, 6.52, & 9.58 A. M. *3.25, 4.06 & *10.58 P. M. Sundays only, 10.55 A. M. 6.10 P. M.	Gardiner	7.00 & 10.15 A. M. *12.40, 1.10, 5.10 & *10.45 P. M. 12.55 Night. 7.20 A. M. Sundays only.
Richmond	7.15 & 10.23 A. M. *3.47 & *11.23 P. M. Sundays only, 11.12 A. M. 6.28 P. M.	Richmond	7.00 & 10.15 A. M. 1.10, 5.10 & *10.45 P. M. 7.20 A. M. 12.40 P. M. Sundays only.
Rockland	8.00 & 10.10 A. M. 1.40 & *9.15 P. M.	Rockland	7.00 A. M. 12.40 & 5.10 P. M. 12.55 Night
Bath	1.00, 7.25 & 10.35 A. M. 12.15 Noon, 4.00 P. M. *11.30 Midnight, Sundays only, 11.15 A. M.	Bath	7.00 & 10.15 A. M. *12.40, 5.10 & *10.45 P. M. 12.55 Night. 7.20 A. M. Sundays only.
Brunswick	3.40, 7.53 & 11.05 A. M. *12.35, *4.25, 4.48 P. M. *12.10 Night. Sundays only, 11.40 A. M. & 6.55 P. M.	Brunswick	7.00 & 10.15 A. M. *12.40, 1.10, 5.10 & *10.45 P. M. 12.55 Night. 7.20 A. M. Sundays only.
Freeport	8.08 & 11.20 A. M. *4.40 P. M. *12.27 A. M. Sundays only, 11.55 A. M. 7.10 P. M.	Freeport	7.00, 10.15 A. M. 1.10, 5.10 & *10.45 P. M. 7.20 A. M. & 12.40 P. M. Sundays only.
Lewiston via Brunswick	7.05 & 10.15 A. M. 4.00 & *11.00 P. M. Sundays only, 10.50 A. M. 5.20 P. M.	Lewiston via Brunswick	7.00 & 10.15 A. M. *12.40, 5.10 & *10.45 P. M.
Lewiston via Danville Jct.	7.15 & 10.48 A. M. 2.18, 4.25 & *6.40 P. M. Sundays only, 8.15 A. M.	Lewiston via Danville Jct.	8.30 & 11.05 A. M. 12.55 & 5.15 P. M. 7.25 A. M. & 6.00 P. M. Sundays
Auburn	7.19 & 10.53 A. M. 2.23, 4.29 & *6.43 P. M. 8.18 A. M. Sundays only.	Auburn	8.30, 11.05 A. M. 12.55 & 5.15 P. M. 7.25 A. M. & 6.00 P. M. Sundays.
Farmington	8.20 A. M. 2.25 P. M.	Farmington	8.30 A. M. 12.55 P. M.
Lancaster	7.52 A. M. 12.40 & 3.46 P. M.	Lancaster	8.50 A. M. 1.25 P. M.
Lunenburg	*3.50 & 7.45 A. M. 3.40 P. M.	Lunenburg	8.50 A. M. 1.25 & 8.50 P. M.
Fabyans	*4.40 & 8.50 A. M. 1.43 & 4.43 P. M. Sundays only, 2.15 P. M.	Fabyans	8.50 A. M. 1.25 & 8.50 P. M. 9.30 A. M. Sundays only.
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No. Conway	*5.57 & 10.07 A. M. 3.11 & 6.02 P. M. Sundays only, 3.31 P. M.	No. Conway	8.50 A. M. 1.25, 6.00 & 8.50 P. M. 9.30 A. M. Sundays only.
Fryeburg	*6.20 & 10.29 A. M. 3.32 & 6.20 P. M. Sundays only, 3.52 P. M.	Fryeburg	8.50 A. M. 1.25, 6.00 & 8.50 P. M. 9.30 A. M. Sundays only.
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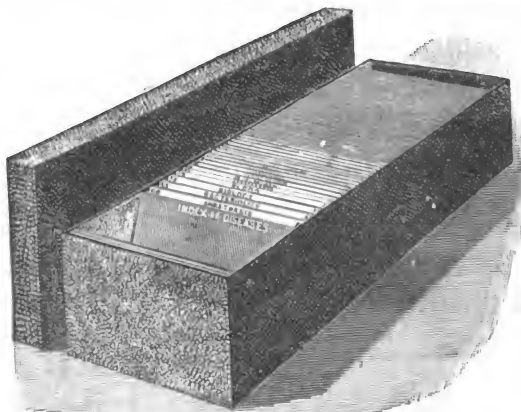
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DO YOU KNOW the story of Thomas à Becket and the Emir's daughter? Of fair Rosamond Clifford's bower in the labyrinth at Woodstock, and the telltale silken thread on Henry's golden spur that lead to her becoming a nun? Of Richard II and the fatal trap-door of Vidomar? Of the dreadful warning that hung over the bed of Isabella of Angoulême? Of the queen who was discovered in London, disguised as a cook-maid?

DO YOU KNOW how the mere fact that the Duchess of Marlborough putting on, by mistake, the queen's gloves, changed, as Voltaire says, the destinies of Europe? Or why the great Elizabeth and her prime minister had to deal secretly with Catherine de Medici's tailors? Or what that which passed between "Nan" Boleyn and King Hal beneath the yew-tree in the cloistered shade of Sopewell nunnery, meant to Wolsey?

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